Missouri Areawide Planning Guidebook

Areawide Planning Activity Checklist

Pre-Planning:

Working with People

- ☐ Request for assistance received and underlying issue(s) reasonable and solvable with areawide planning
- ☐ Initial planning area boundary established
- ☐ Stakeholders identified
- ☐ Leader(s) and power actors identified
- ☐ Key roles and members identified (e.g., chairpersons, advisors, workers, staff)

Organization of People and Information

- ☐ Organizational structure (e.g., council, committees, subcommittees, teams) selected
- ☐ Logistics identified (e.g., meeting places, stakeholder contact methods, meeting management methods, documentation and community communication requirements)

Planning:

1. Identify Problems and Opportunities

- ☐ Draft list of major problems (scoping) and opportunities created

2. Determine Objectives

- ☐ Major problems/opportunities restated as objectives
- ☐ Objectives written in terms of Desired Future Conditions (DFC)
- ☐ Related Quality Criteria (QC) identified

3. Inventory Resources

- ☐ Conditions needing to be inventoried identified including related ecological, social and economic factors
- ☐ Inventory techniques are selected and consistent with accuracy, available time, staff and funding
- ☐ Inventories conducted to determine current conditions and causes of impairment

4. Analyze Resource Data

- ☐ Existing conditions compared to DFCs and QCs and deficiencies and needs noted
- ☐ Causes of impairment validated
- ☐ At risk ecological, social and economic conditions and interactions with DFCs and QCs determined

5. Formulate Alternatives

- ☐ All reasonable, acceptable measures, practices, and management identified and clearly documented.

6. Evaluate Alternatives

- ☐ Consistent evaluation of all alternatives made (effectiveness, profitability, acceptability, environmental impact, etc.)
- ☐ Documentation of effects on critical ecological, social and economic factors (NEPA requirements as applicable)

7. Make Decisions

- ☐ Select alternatives that meet objectives, DFCs/QCs and other criteria

8. Implement Plan

- ☐ Identify strategies and methods to carry out decisions (e.g., information-education, financial assistance, technical assistance for consultation, regulatory)
- ☐ Develop schedule and carry out strategies

9. Evaluate Plan

- ☐ Determine application rate of decisions
- ☐ Determine achievement of DFCs/QCs
- ☐ Need for iterative planning and adaptive management determined.

Table of Contents

Introduction

Purpose of the Planning Guidebook

This guidebook is a reference source for the Natural Resources Conservation Service (NRCS), Soil and Water Conservation Districts (SWCD) and other conservation partners in Missouri to use when facilitating areawide planning. Areawide planning is a process for local people to assess natural resource conditions and needs, set goals, identify programs and other resources to solve those needs, develop proposals and recommendations, implement solutions, and measure success. An areawide conservation plan is developed for a watershed or other geographical area. The areawide conservation plan addresses all resource problems identified, and contains alternative solutions that meet the minimum criteria for each resource, and applicable laws and regulations.

The planning process helps citizens develop productive partnerships, reach consensus, make decisions, and obtain financial and technical resources to carry out their ideas. One outcome of areawide planning is the enhanced ability of communities to manage natural resources and meet local goals. The purpose of the Planning Guidebook is to:

- Supplement the National Planning Procedures Handbook (NPPH)
- Encourage Conservation Partners to carry out areawide planning.
- Facilitate communication between partners and the public
- Provide resources to aid in the process

How to Use This Guidebook

The NPPH describes the process and procedures pertaining to the areawide planning process. To supplement this material, this guidebook gives detailed "insider tips" for carrying out areawide planning at the local level. It explains why a particular step is important and suggests how to do it. The guidebook also includes "General Resources" which cover a variety of tasks and skills relevant during the entire planning process.

The Planning Guidebook follows the Nine-Step, Three Phase planning process. It has practical ideas for implementing areawide planning, gleaned from our experience working with Missouri communities. It will explain what to do first and what comes next.

Refer to the guide for help to identify stakeholders, conduct effective meetings, involve the public, determine inventory needs, analyze data, build local ownership of plans, implement plans, and much more.

Areawide planning is driven by local needs, local people, and local action. This guidebook can help facilitate planning so that local people develop and implement plans to protect, conserve and enhance natural resources within their social, economic, and ecological interests.

Areawide Planning Basics

Why Plan?

Who Plans?

Planning Timelines

- ❖ What is the time frame?

How to Plan

- ❖ Three Phase,
  Nine Step Process

Plan Format and Content

Why Plan?

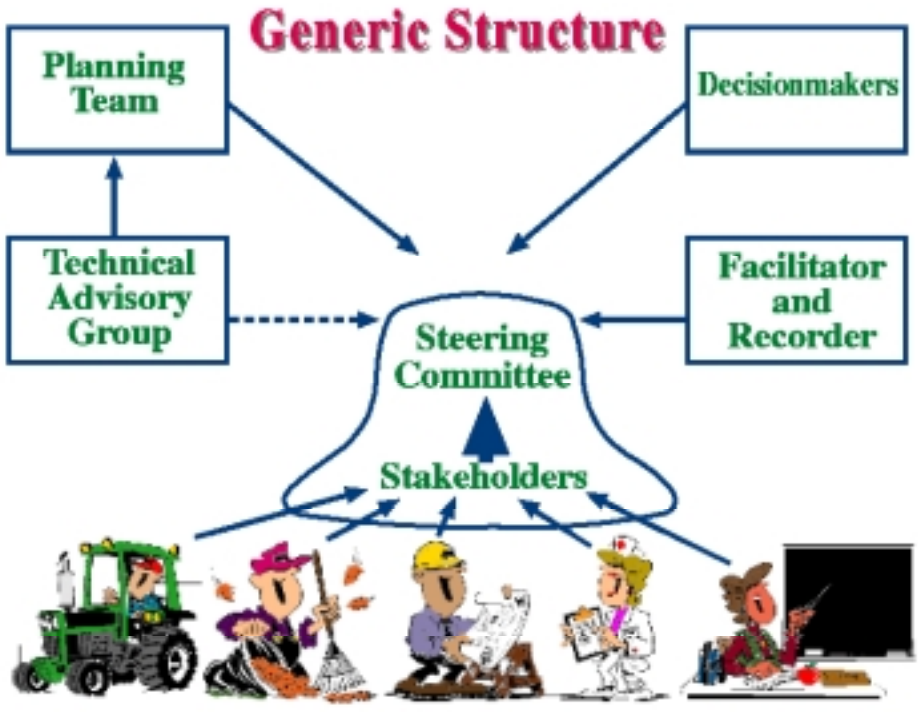
Do any of these describe the natural resource concerns in your community?

- ❑ *Issues so complex that people must work together to address them.*
- ❑ *Everyone cannot agree about how to address the concerns.*
- ❑ *Management strategies will take a long time to implement, and they will affect others.*
- ❑ *Management strategies will require public funds or technical assistance to implement.*

Natural resource issues such as these can be most effectively addressed with the areawide process. The Natural Resources Conservation Service (NRCS) along with our partners, the Soil and Water Conservation Districts (SWCD), and other partners use this type of planning to help communities develop areawide management plans that meet locally-identified objectives. The plan identifies actions that the community supports and strategies for how they will be accomplished.

NRCS and SWCDs can facilitate this process when called upon by local people. Often the county SWCD will formally sponsor the planning effort, but the project may also be initiated by a municipality, a county agency, or concerned local citizens. ***Grant-making agencies often look for evidence of planning and public support as criteria for funding.***

In this structure the planning team, technical advisory group, facilitator, and recorder work under the leadership of the steering committee and decisionmakers to help carry out the planning process on behalf of all of the stakeholders.



Who Plans?

Areawide planning essentially involves the interactions of groups of people.

The Steering Committee is a group of about 10 to 20 people who are typical of all the stakeholders in the planning area. Stakeholders are those who will be affected by or have an interest in what happens in the planning area.

Stakeholders on the steering committee may include:
- Residents and/or landowners
- Farm owners and operators
- Local government officials
- Business and industry representatives
- Environment and conservation groups
- Other special interest representatives

The steering committee begins by identifying the resource concerns and objectives in the planning area. Then with assistance from the technical advisors and with periodic input from the public, they develop a management plan to solve the problems

The ***Planning Team*** should be interdisciplinary (members that rely on each other to accomplish their tasks) and may include multi-agency personnel. An example is the relationship required between an economist and a hydraulic engineer during a flood damage analysis. Flow data from the engineer must be provided before the economic evaluation can be completed.

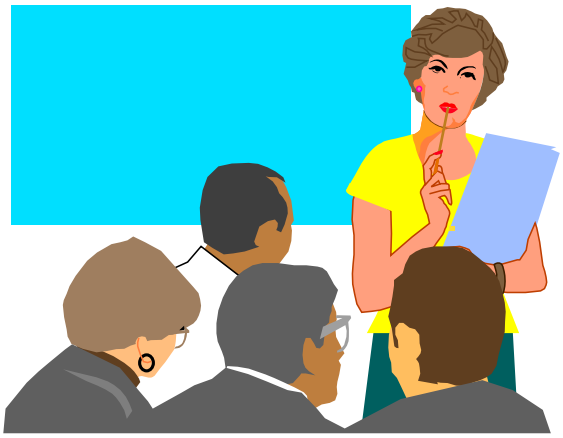
Planning team composition and size will vary between projects. Each team should have a team leader and a core group with the primary responsibility of areawide planning. Planning team members should be planners first and their specific discipline second.

Technical Advisors are discipline specialists who provide technical input into the process.

They provide technical reports, research issues, data, and legal opinions to the Planning Team and may, or may not, meet with the Steering Committee or Decisionmakers.

Decisionmakers are those individuals, groups, units of government, or other entities that have the authority by ownership, position, office, delegation, or otherwise to decide on a course of action. For example, a county government representative may serve on the steering committee; however, action may be needed by the county governing board, at an official county board meeting, in order to legally decide a course of action on behalf of the county.

The use of an experienced ***facilitator***, a person with no stake in the outcome of the process, will contribute to the effectiveness of any planning effort.



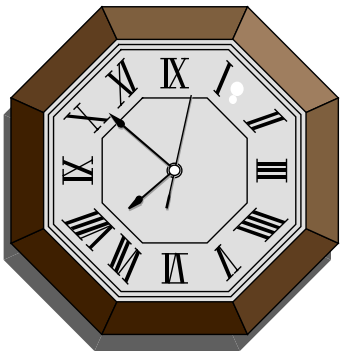
The final plan must be generally acceptable to all stakeholders. Some serve on the steering committee or technical advisory group. The remaining "non-committee" stakeholders contribute to the planning project by providing periodic input on their concerns, preferred alternatives, and desired outcomes.

Planning Timelines

Requests for areawide planning are made by stakeholders in a watershed, community, or other planning area to the SWCD, NRCS or other conservation partners. Determining whether planning is warranted is the first activity NRCS and other partners will undertake with the stakeholders.

What is the time frame?

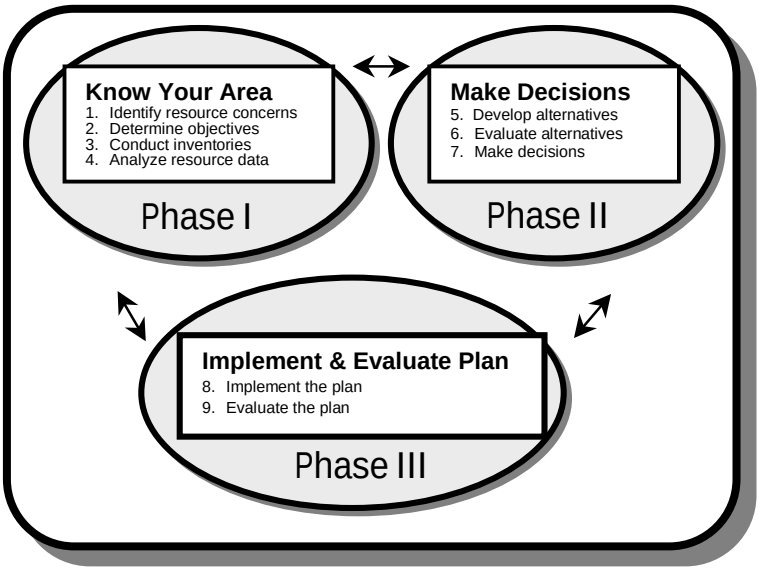
The time it takes to complete an areawide plan depends on the purpose, number and variety of stakeholders involved and complexity of the natural resource concerns. Areawide plans take time to develop because the planning process involves informing and receiving input from a variety of stakeholders. Natural resource inventories may involve examination over more than one season, stakeholders may need to be interviewed or surveyed and analysis may involve extensive computer modeling or other time consuming methods. For these reasons, it can typically take from 9 months to 2 years or more to develop an areawide plan.



A planning timeline is an important pre-planning activity and should be developed by the steering committee with guidance from the technical advisory group and planning team. In addition to natural resource complexities and social dynamics, timeline considerations should also include deadlines for specific grants or regulatory agency requirements. The frequency of steering committee meetings, availability of natural resource specialists, and complexity of decision making should also be considered.

How to plan:

The NRCS uses a Three-Phase, Nine Step planning process.



Phase One

This is the information-gathering and data-collection phase. Phase One has four steps:

1. ***Identify concerns and opportunities***
   -The steering committee identifies resource concerns and opportunities using a variety of processes.
2. ***Determine objectives***
   -The committee identifies their "desired future conditions" for each concern.
3. ***Inventory resources***
   -Planning team and technical advisors conduct inventories of the resources.
4. ***Analyze resource data***
   -Validates and quantifies resource problems.

Beginning in Phase One, and continuing throughout the planning process, the steering committee will interact with the public. They can seek input, ideas, and suggestions via the media, presentations to community groups, public meetings, brochures, and exhibits. Public participation creates awareness about the planning process and sets the stage for successful implementation of the final resource plan.

During this phase, the steering committee will learn about existing conditions, resource concerns, and opportunities. To understand the planning area, the committee works with the planning team and technical advisors, conducts tours, brings in educational speakers, or networks with other steering committees.

Phase Two

Phase Two involves the formalization of alternative solutions and selection of an acceptable course of action.

5. ***Formulate alternatives***
   -Using the information they collected, the planning team suggest a number of alternatives that will meet the objectives identified.
6. ***Evaluate alternatives***
   -The steering committee evaluates these alternatives and
7. ***Make decisions (or recommendations)***
   - about which actions they advocate. These decisions and supporting information are then documented in the areawide management plan.

Phase Three

Phase Three is the implementation and evaluation phase. There are two steps:

8. ***Implement the plan***
   -Funds and technical assistance are sought to implement the various actions in the areawide plan.
9. ***Evaluate the plan***
   -As the plan is implemented, the results are continuously evaluated and modifications made as necessary.

Areawide Planning

- Involves all stakeholders
- Uses consensus planning
- Identifies desired future conditions
- Inventories resources
- Determines priorities for action
- Builds local partnerships & coordinates with government
- Ensures implementation and follow-up

Plan Format and Content

What is it?

The plan describes the planning process and documents all of its outcomes — the concerns and objectives of stakeholders, resource inventories, resource management strategies, and implementation information.

Why is it important?

The plan provides written guidance to local people about the management of their resources over time. It demonstrates broad community support for the identified resource management alternatives. It informs grant-making agencies and technical experts who help with implementation about current conditions in the planning area, the interests of stakeholders, and their preferred strategies for managing natural resources.

When do we do it?

Writing the plan begins after resource inventorying has been completed and the steering committee has identified their preferred management alternatives.

How do we do it?

Areawide plans come in a variety of formats. Some are professionally produced glossy publications with photos and drawings; others are text-only documents prepared on a home computer. To keep the plan reader-friendly, technical details might be provided in appendices. Or a single areawide plan might consist of several different documents — a leaflet highlighting major elements of the plan, a simplified plan for the general public, and detailed technical information for those professionals who will be directly involved in implementation.

No matter how it is formatted, most stakeholders have found the following topics to be minimum elements of an effective plan.

1) Abstract or cover sheet

- Letter of request or commitment to participate in planning
- Reason for preparing the report (underlying need and purposes for taking action)
- Date and title of the document
- Letters of support

2) Executive Summary *(generally less than two pages)*

3) Planning area

- Describe the planning area in terms of physical, demographic, social and other important data and include predicted changes that may occur in the future.
- Describe the present land use and predicted future land use.

4) Problems and opportunities

- Introductory paragraph – a short summary of the section.
- Describe each problem or opportunity in terms of location and magnitude and include:
  - Extent and area affected
  - Magnitude and context
  - Types of structures damaged, such as houses, buildings, roads, and water supply.
  - Limitation of desired activities because of impaired resources; i.e., recreation, fishing and hunting.
  - Quantified damage in days; loss of fish, wildlife, and plant species; etc. in monetary of non-monetary units.
  - Map showing the location where damages are occurring, where opportunities may exist, or where damage may be prevented
  - Frequency of damaging events.
  - Social, cultural resource, and ecological impacts that are occurring (may include safety, health, peace of mind, race, elderly, threatened or endangered species, wetland values, evacuation plans, and police/fire protection.)
    - Discuss opportunities for improving quality of life, such as

recreation, habitat improvement, or aesthetic values

- ❖ When minor problems, or those not related to the resources, are introduced, explain how they will be handled in relation to the areawide conservation planning effort, i.e., those not related to the resources may be referred to an appropriate person, agency, or entity to handle.

5) Local objectives

- Describe the objectives of the decisionmakers and stakeholders in terms of desired future conditions for the ecological, economic, and social considerations.

6) Resource inventory

- Describe significant resources by location, quantity, and quality
- Describe how the inventory was conducted
- Develop predictions of future conditions without an areawide conservation plan. Include a specific time period and recognize the impacts of ongoing programs
- Include a discussion on how scoping was used in this process

7) Alternatives

Describe each alternative and include:

- Type of measures
- Costs
- Effects
- Probability of meeting the client's objectives
  Note: NEPA requires all viable alternatives to be presented with substantially equal analyses.

8) Record of decisions

- Record the decisions agreed to by the client and stakeholders
- Public participation record – agency consultation (required for NEPA)
- List of preparers (required for NEPA)

9) Implementation documentation

- Implementation strategy developed in planning step 8
  Note: Include additional documentation developed for specific programs or funding authorities based on the client's and stakeholder's decisions to pursue these programs or authorities.

10) Plan evaluation

- Action plan developed in planning step 9

A completed plan should clearly describe what is to be accomplished, why specific components are included (benefits), how the plan will be implemented, and who will be responsible for the implementation.

Pre-Planning Activities

Assessing the Need for an Areawide Plan

Understanding Communities for Successful Planning

Identifying Stakeholders

Establishing Operating Procedures

Defining the Planning Area

Assessing the Need for an Areawide Plan

Assessing the need involves working with stakeholders to determine whether an areawide plan is the appropriate way to address their concerns.

Generally, requests for planning are made by stakeholders in a watershed, community, or other planning area to the SWCD, NRCS or other conservation partners. Determining whether areawide planning is warranted is the first activity NRCS and other partners will undertake with the stakeholders.

One benefit of areawide planning is the assessment of offsite impacts of individual practices both negative and positive. *An individual practice may solve an onsite problem but create a problem downstream.*

Areawide planning is not needed if the resource problems are only site-specific and remedied by conservation practices applied to the site. For example, gully erosion on a farm field or eroding banks of a livestock pond call for conservation treatment undertaken by the individual landowner. In contrast, areawide planning is usually needed to resolve problems like flooding, stream sedimentation or water quality degradation occurring throughout a watershed or other planning area. Concerns such as these may be best addressed with the areawide planning process when:

- ✓ Multiple stakeholders are affected by the problems but they lack consensus about what should be done.
- ✓ The problems are interrelated and complex.
- ✓ Solutions can only be implemented over a long period of time with the collaborations of many parties.

When one or more stakeholders identify resource concerns for which they want assistance, consider the following:

1) Determine if other stakeholders are experiencing similar resource problems. If further investigation identifies, for example, multiple streambank erosion sites or sediment problems from many construction sites, the resource concerns may be best addressed on an areawide basis.
2) Solicit open discussion with other stakeholders within the area to measure their interest in an areawide plan. Areawide planning is a locally led process that requires strong stakeholder interest. A single citizen concerned about the problem is not sufficient for an effective areawide planning effort.
3) Review any past and current planning projects. In some cases past planning efforts are still applicable. Existing plans may simply need to be updated, or new implementation strategies may be devised. County and municipal long range plans are useful tools for future areawide plans.
4) After it is determined that areawide planning is desired by the community and is appropriate, identify stakeholders to serve on the steering committee.

Understanding Communities for Successful Planning

The term "community" often brings to mind cities, suburbs, villages, or farm towns. A planning area might include all these communities defined by political boundaries. Communities defined in other ways may also be significant in the planning area. For example, in a planning area there may be a community of farmers and a community of non-farmers, or a community of urbanites and a community of suburbanites. A community may also be a geographical area that includes only part of a political boundary or more than one political boundary.

Social, cultural, and economic characteristics of communities concern people and their relationships with each other. They include demographics (age, race, income, etc.), attitudes and values, information networks, how decisions are made and problems resolved, and the availability of resources. Some other community characteristics relate to how people identify themselves and their town, their collective history and how it affects them today, local leadership and social divisions, and how the community manages change.

Q. What's the difference between a community's "culture" and "cultural resources"?
A. One definition of *community culture* is "A complex learned and shared system of human behavior, including the way people think about things, as well as more overt physical behaviors. The codes, customs, habits, and understandings of one's own culture is taken for granted and assumed 'normal.'" *(Social Sciences Institute)*
"*Cultural resources* are all the past activities and accomplishments of people. They include buildings, objects, locations, and structures that have scientific, historic and cultural value. The cultural resources that NRCS deal with most often are known as historic properties. These may be prehistoric or historic districts, sites, buildings, structures, features, or objects."

Importance

Understanding communities in a planning area is necessary in order to:

- Evaluate existing resource conditions, causes and impacts (including impacts on people).
- Assess the effects of alternatives, including effects expected if resource concerns remain untreated.

Understanding communities is also critical for a successful planning process. Socio-economics affects the locally led areawide planning process and its outcomes, generally influencing:

- Conflict, cohesion and public involvement during the planning
- Decisions about management alternatives
- Whether and how the plan is implemented

Consider a few fictitious examples of how resource planning is affected by social, economic and cultural community characteristics. Naturally these scenarios don't exemplify all communities, but they do highlight the importance of social, cultural, and economic considerations in areawide planning.

• A small town struggles with the locally-led process because their local leadership capacity is limited by population decline and residents who are primarily elderly or very young.

• A wealthy community adopts a resource plan advocating innovative land management practices because its strong local economy supports risk-taking.

• Minority stakeholders in a rural area are hesitant to participate on a Steering Committee because in that area they are less involved in community affairs.

• Farmers in an agricultural area oppose non-farmer involvement to address contamination of the town's water supply from agricultural chemicals because they feel it is an agriculturally related issue.

When is it done?

Socio-economic and cultural information is collected by technical specialists during Step 3 of Phase One, when resources are inventoried. Also, throughout the entire planning process the Steering Committee uses and enhances their understanding of communities in the planning area.

How is it done?

"Community Profiles" or "Social Profiles" document the socio-economic and cultural characteristics of communities for resource planning. Community profiles are usually geographically based (e.g., a profile is written for all the municipalities in a watershed) but sometimes profiles are done for specific social groups, such as the landowners in a planning area, or the limited resource farmers in a planning area.

Methods of understanding socio-economics of communities depends on the project, the communities, and the resources available to collect, analyze and interpret the information. Like other inventories, community profiles can take days, weeks or months, depending on resources available and level of detail desired.

Consider two main categories of information about communities:

1. *Primary data: First*-hand interaction with the communities, including interviews with community leaders, review of newspapers, focus groups, and citizen surveys.

2. *Secondary data:* Population, housing, economic, and agricultural census data collected at national, state and local level by various agencies.

The easiest and most effective way to learn about communities is to check the census (secondary data source) and talk with people who live, work and visit there (primary data source).

Here are some topics you may want to cover during conversations with people who know about communities in the planning area:

Sample Questions for Community Leaders

Demographics. What are the basic population statistics (size, density, spacial distribution, ethnicity, poverty, employment) in the community? What are the important subgroups (e.g., ethnic, religious)? How do these groups vary in their values, objectives, and priorities?

Economic conditions. How would you describe the economic health of the community (average per capita income, poverty rate, families receiving public assistance, etc.)? Describe the businesses and industries in this community. What sectors of the community's economy is doing better or worse? How has this changed over time? Why?

Decision-making. Who are the community leaders? Who do community members trust? How are decisions usually made? Who are the typical decision makers?

Conflict resolution. How is conflict usually handled in the community? Are there certain key conflicts that are still important to the community?

Social divisions. On what basis are social divisions defined? Who is "in" and who is not? Why?

Problem-solving experience. What issues concern the community? Has the community been through other locally led projects? What partnerships exist and what can they do? What money has been brought in to the community? What cooperative projects has the community undertaken? What referendums have passed and failed? What are existing laws and ordinances significant to the issues?

Trends. What population, land use and economic trends is the community experiencing? How is the community receiving these trends? How is the community managing change?

Values and norms. What are the dominant values in the community? Especially relevant may be attitudes toward growth and development, natural resource stewardship, agriculture, education, etc. How conservative and risk adverse is the community? How innovative is the community?

Identity of community. Is the community identity tied to agriculture? That is, do people think, "We're a farm town"? Other community identities may be "a traditional, conservative community," "a family town," a "commuting suburb", etc.

Identifying Stakeholders for the Steering Committee

The steering committee is made up of 10-20 people who represent the stakeholders in the planning area. *Stakeholders are those who have an interest in or may be affected by actions recommended in the management plan.* Stakeholders who serve on the steering committee may or may not be decisionmakers during the planning process. They work with technical advisors and planning team and interact with the public to develop an areawide plan that can be supported and implemented in the planning area.

Begin assembling a steering committee after stakeholders request assistance and the initial assessment indicates that areawide planning is appropriate.

In order to develop a plan that addresses all resource concerns and integrates ecological, economic, and social factors, multiple stakeholders interested in developing a management plan need to be identified.

Work with initial stakeholders to identify people who are interested in planning for their area. Select steering committee members who:

- ***Are able to represent stakeholder groups as well as their individual interests;***
- ***Can represent the decisionmakers or can serve as a decision-maker in the planning area;***
- ***Together, represent a cross section of the social, economic, and cultural communities in the planning area;***
- ***Together, represent as many of the differing views, opinions, and interests in the area as practical.***

Any stakeholder wanting to participate should be given the opportunity. If there is a problem with the steering committee getting too large consider sub committees. ***In order to keep numbers manageable, one individual can represent multiple interest groups.***

Normally, federal and state agency staff should not be included on the steering committee unless they have a vested interest. Instead, they serve as technical advisors or help facilitate the planning process. To do otherwise may weaken local leadership and acceptance of the plan.

Hold one or two "preplanning" meetings with the stakeholders. The purpose of these early meetings is for the group to understand the areawide planning process, assess whether a plan is needed in their area, and determine whether they wish to participate in its development. Once this core group is committed to the project, they can expand their numbers if any critical stakeholder was overlooked during the early stages of the process.

The Steering Committee

Made up of Stakeholders: 10-20 representatives all of whom have an interest in, or are affected by, the plan.

The Committee may include:

- Residents
- Landowners
- Farm owners and operators
- Local municipal officials
- Business and industry representatives
- Environment and conservation groups
- Other special interest representatives

Limiting the steering committee to around 10-20 participants does not mean the committee makes decisions in a vacuum. The steering committee must periodically seek input from, and provide information to, the community of people in the planning area to ensure that the final plan is acceptable to all.

Establishing Operating Procedures

What are they?

Operating procedures address how steering committee members function as a team. They address procedural things such as who will chair the committee, how member absences will be handled, who will take meeting minutes, and how agendas will be distributed.

Operating procedures for steering committees are similar to the bylaws of boards, councils and commissions. However, because the newly formed, volunteer steering committee does not have legal responsibility for the operation and management of an organization, the formal written bylaws typical of boards is not warranted. Instead, it's usually sufficient for the steering committee to make decisions about the procedures that will be effective throughout the planning process, and document them in the meeting minutes. Later, if the committee reorganizes as a membership group accepting public funds, applies for non-profit status, or achieves some other legally recognized status, then more formal documentation of procedures will be needed.

When:

Discussion about procedures, which will guide the activities and functions of the steering committee, should take place during the first few meetings.

Why:

Operating procedures add consistency and reliability to the planning process, and help the committee get things done. A consistent record of committee proceedings will be maintained. Members will know whom to call with questions between meetings, and will be confident of when the committee will normally meet.

Decisions about operating procedures are made by the steering committee. With assistance from a facilitator, resource planning specialist, or other key individual, the committee should discuss the following:

• ***Steering Committee Leadership***

The steering committee selects a Chairperson. Some committees choose two Co-Chairs to share responsibilities. The Chairperson is the primary liaison between the steering committee and NRCS (and other Conservation Partners who are lending planning support). The Chairperson works with the steering committee to establish meeting agendas. He or she is responsible for sending correspondence to committee members between meetings, communicating with the technical advisors, and in general, working with NRCS and other partners to make sure the planning effort is proceeding on schedule. The Chairperson is often designated as the primary contact person who can answer questions and provide information to the public.

The steering committee decides how a Chairperson will be selected. If more than one person is interested, or nominated, then the steering committee may want to vote and "elect" the person receiving the most votes.

• ***Attrition and Absenteeism***

The steering committee decides how absences among committee members will be handled. People occasionally miss meetings. Most committees establish a procedure for member absences. If an individual misses a meeting, then the decisions made at the meeting cannot be disputed by the absent member. In other words, the process continues even if someone cannot attend a meeting. It is important to keep all committee members informed of discussions and decisions.

On occasion, people may also need to drop out of the planning process. Adding new members can be problematic in the middle of the planning process because new members may not agree with what has taken place, and "starting over" may be discouraging to the rest of the committee. On the other hand, new stakeholders should generally agree with the decisions of the steering committee because the committee should be representative of all the views and interests in the planning area.

In any case, one or two people resigning from the steering committee usually does not cause problems and does not warrant replacing them. However, if several people are no longer participating, then it may suggest that interest and support for the planning is lacking. Heavy attrition warrants an honest look at whether the community supports and is interested in the planning project.

• *Tenure*
The planning process tends to take a year or more. Usually steering committee members want to stay involved through the entire process. After the management plan is completed, give everyone an opportunity to end his or her participation with a sense of accomplishment and provide closure for a job well done. Then, any individuals who wish to remain active during the implementation of the plan can choose to do so, and those who don't can end their participation.

It is important to distinguish between the tenure expected of members during the planning phase compared to tenure during implementation. To successfully complete an areawide plan, consistent participation from the same group of stakeholders is needed. However, once the plan is completed, a more fluid mix of participants to guide implementation is preferred. Of course, not all steering committees formally "reinvent" themselves as "Implementation Committees," but if they do, the goal is generally to have an on-going advisory group that can help insure implementation of the plan. Because these implementation committees may be indefinitely active, it's critical that new stakeholders continually become involved.

• *Meeting Location*
A regular meeting time and place helps committee members consistently attend meetings. The steering committee decides how often they will meet, and for how long. Many committees meet once a month, though meeting more frequently can move things along faster. It's best to limit any meeting to two hours, except for special events like tours or conferences.

• *Decision Making Process*
The steering committee determines how they will make decisions. Most substantive decisions are best made by consensus. The group has consensus when everyone can support the decision. With consensus, each person may not agree with every aspect of the decision, but they can lend their support to it. Less substantive decisions, such as who will chair the committee, can be made by vote.

• Authority in Decision Making
Usually, each stakeholder on the steering committee has equal decision-making status. The Chairperson may act as the spokesperson for the group, but does not have more authority than anyone else. Furthermore, each committee member represents the community at large.

• *Other Issues*
Other procedural issues that the steering committee will want to address include how agendas will be distributed, confidentiality of meeting discussions, public communication, and roles and responsibilities of members.

Defining the Planning Area

The area to be planned often seems obvious. Bank erosion and sedimentation in a local stream, for example, requires addressing conditions throughout the stream's "watershed," or all the land that drains to the stream.

On closer examination, however, watershed terminology is not always so simple. It is possible to define almost an infinite number of watershed boundaries, depending on the reference point. One small stream drains to successively larger streams. Should the plan address the *subwatershed*, *watershed*, or *subbasin* level?

No matter the terms used, it's critical to clearly define the boundaries of the planning area. The planning area will focus the identification of problems and opportunities, the inventory work, and the development of management strategies. The stakeholders who should be represented on the steering committee will also be defined by the planning area.

When is it done?

The planning area needs to be identified during the initial pre-planning meetings with stakeholders.

How is it done?

Usually areawide planning is conducted on a watershed basis. In general, watershed-based planning is advantageous because it gives a systems perspective for problem solving, works across political boundaries, and is the most effective way of addressing problems such as flooding and nonpoint source pollution. The steering committee is encouraged to follow guidance and requirements of funding sources concerning size of the watershed.

The NRCS District Conservationist and other resource professionals will help stakeholders identify the drainage area relevant to their concerns. Start by reviewing a watershed map such as the Missouri NRCS Hydrologic Unit map. All upstream watershed acreage should be included in the planning area, while downstream acreage is usually limited to a juncture with the next major waterbody.

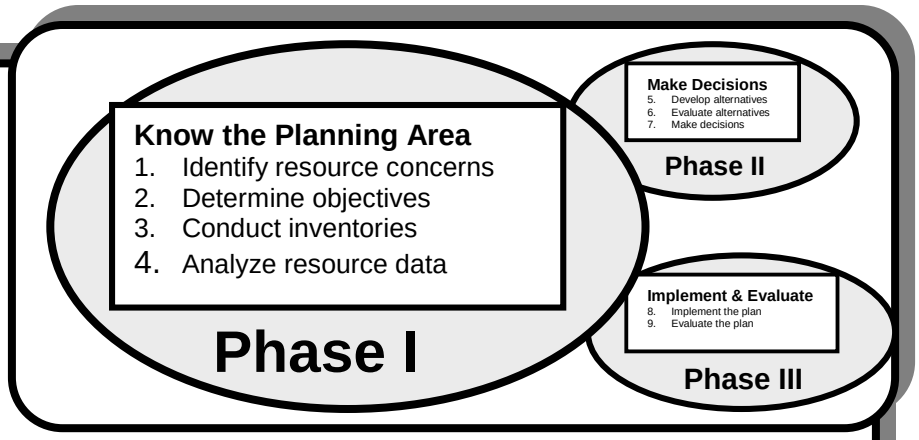
Along with stakeholder input, consider the conservation activities of Conservation Partners. Try to limit the size of the planning area because the larger the area, the more complicated the planning process—especially when watersheds cross state lines. Also, larger areas necessitate more general plans, which tend to be less effective. In cases where a larger watershed or basin study is needed to ascertain the resource problems, general plans can be developed on the larger area with more intensive targeted plans developed from sub basins or sub watersheds.

Typically this analysis results in a planning area encompassing all the land draining a large community stream (usually named), and one or more (often unnamed) small creeks or drainage ditches.

Occasionally areawide planning is not conducted on a watershed scale. Instead, the planning may be done for a karst area, an oil brine damage area, a mine-reclamation area, for a single community, or a county. The same considerations for watershed based planning apply for non-watershed resource planning. Boundaries are suggested by the types of resource issues, community interests and geographical considerations. All public and private lands necessary to effect change should be included. Local stakeholders should help finalize planning area boundaries.

The following are some indications that the planning area is appropriately defined:

- There are similar stakeholder concerns throughout the planning area.
- There are consistent resource conditions, land uses, and planning issues throughout the planning area.



Phase One: Know the Planning Area

Step 1 – Identifying Resource Concerns

Step 2 – Determining Objectives

- Mission Statement
- Scoping Process
- Setting Up the Planning Team

Step 3 – Conducting Resource Inventories

- NEPA

Step 4 – Analyzing Resource Data

Identifying Resource Concerns

Step 1

The resource concerns identified by the steering committee will guide the entire planning process. The inventory work of the planning team will focus on these resource concerns. In addition to the planning team, the technical advisors also will identify potential management strategies for the concerns, and those strategies which the steering committee endorses will be promoted in the final management plan.

When is it done?

After a committee of representative stakeholders has been formed, the committee has discussed the procedural issues that will guide the planning process, and they've defined the planning area, then it is time to identify the resource concerns. Identifying resource concerns is the first step in the Nine-Step, Three-Phase Planning Process.

How is it done?

Use a facilitator to help the steering committee prepare a list of the resource concerns in the planning area. As always, the facilitator should be viewed by the steering committee as a neutral party. For this reason, a steering committee member should never facilitate the discussion about resource concerns, and usually local field staff should refrain from facilitating. Instead, try using a trained facilitator from outside the planning area. During the discussion of resource concerns, it is usually adequate to have the discussion facilitator also record all the ideas, though a separate recorder can be used.

Here is the process for the facilitator to use with the steering committee:

1) Begin by explaining to the committee why they are identifying their concerns for the planning area, and how these concerns will guide the work of the planning team and the entire planning process.

2) Next, explain they will use a technique called "brainstorming" to prepare a list of resource concerns. Give an overview of the brainstorming process: Review some basic ground rules with the steering committee before the brainstorming begins. The committee should add any additional rules they think are important. If the steering committee veers off track during the discussion (for example, if they begin to debate someone's ideas), the facilitator intervenes and reminds the group of the ground rules.

"Each member takes turns identifying a concern in the planning area, until there are no new concerns. The steering committee avoids lengthy discussion about the merits of each person's concerns. Instead, everyone identifies all his or her concerns no matter how trivial or controversial.

Then, they combine (if needed) and rank the entire list so those concerns that are most important to most members of the group will be addressed in the planning process.

At this time the steering committee should avoid discussing ways to solve the problems identified by the group. The primary role of the technical advisory group is to identify potential solutions to the concerns for the steering committee's consideration, so lengthy discussions about how to solve the problems will occur later in the planning process."

Brainstorming Ground Rules...

- Leave rank and status at the door
- No criticism or evaluation
- Quantity and exaggeration is welcome
- Record all ideas
- Everyone participates
- There are no wrong ideas
- Build on the ideas of others

3) After the brainstorming process and the groundrules are explained, the facilitator asks each person to write down all their concerns for the planning area. The facilitator asks, "What are your concerns in this area?" After people stop writing, go around the room and ask each person to share their ideas. Record each idea on a flip chart in the front of the room. Here are some tips for effective recording of ideas:

- Always record ideas in the participant's words only. The facilitator/recorder should never paraphrase. Instead, ask participants to paraphrase their own ideas so the recorder can write it succinctly.
- Leave plenty of space on each page so that similar ideas can be written together.
- Set up several flip charts so the recorder can write on multiple sheets of paper with less page turning.
- As ideas are recorded on the flip chart pages, have someone besides the facilitator (e.g., field staff) post pages on the walls where the steering committee can see them.

4) After everyone's ideas are listed, the entire list is reviewed and similar ideas are grouped together. Always ask the person who offered an idea whether it fits with another before merging them. Consensus is required before changing any items on the initial brainstorming list. Work with the steering committee to ensure the final list has discrete ideas, which do not overlap with any other ideas. Also make sure everyone understands the meaning of each idea. Put letters beginning A, B, C, etc. next to each idea or cluster of merged ideas so it's clear to everyone which ideas comprise the list of concerns. Avoid using numbers. Then, review the list to see how many concerns were identified. At their discretion, the steering committee may wish to narrow down and prioritize their list. As a general rule, about ten or fewer concerns is usually manageable.

5) To reduce the list of concerns, each person identifies their top concerns and a tally is made of the top scoring ideas for the entire committee. This is called the "Nominal Group Process" and it helps the steering committee quickly reach consensus on their top concerns. If the committee wants a list of the five most important concerns, each person will identify their top five concerns. If they want ten concerns, each person identifies their top ten concerns. The Nominal Group Process is an effective way of eliminating less critical concerns while avoiding contentious discussion.

To use the Nominal Group Process, give each person the appropriate number of sticky dots (i.e., five or ten dots, depending on the size of the desired final list of concerns). Give the group five or ten minutes to privately write down the letters of the concerns that are most important to them. When everyone is finished, have them place their sticky dots next to those concerns on the posted flip charts. Add up the number of "votes" each idea received. Eliminate low scoring ideas. Review the final list with the steering committee, and review how the list will be used.

After the resource concerns are identified, the steering committee will indicate their objectives or "desired future conditions" for each concern. The steering committee and the field staff will also identify technical experts who can address their concerns as part of a technical advisory group. During this period, the steering committee may also want to conduct a tour of the watershed or planning area, if they haven't already done so.

Determining Objectives

Step 2

What is it?

Objectives are the goals the steering committee is working towards or intending to accomplish. Objectives are also known as "Desired Future Conditions" in the NRCS-National Planning Procedures Handbook. They are the stakeholders/steering committee's expression of the desired future state of the resources compared to existing conditions. Objectives can be qualitative (expressed in words) or quantitative (expressed in numbers). For quantitative objectives, target values can be set depending on the availability of data.

When is it done?

The steering committee determines their objectives after they have identified the resource concerns in the planning area. Determining objectives usually takes place around the third or fourth steering committee meeting.

Why is it important?

The steering committee needs to reach consensus about their objectives, and capture the objectives in writing. Reaching consensus and documenting the results is important for several reasons. Discussing objectives among steering committee members provides an opportunity for the committee to work out their differences early in the planning process. Without clearly stated objectives that all support, the steering committee will later find it difficult to select and endorse solutions to the resource problems. Further, the objectives are critical information for the planning team and technical advisory group. The planning team uses the objectives to understand what the steering committee wants to accomplish, and they identify solutions to the resource problems that can meet these objectives.

How is it done?

A facilitator is used to solicit and record the objectives of the group. The facilitator sets the tone and the atmosphere of the meeting by helping participants feel comfortable with each other and encouraging participation. *As always,* ***the facilitator is a neutral party.*** When objectives are being developed, it is particularly important that the facilitator not be perceived as having any personal preferences as to what should happen in the planning area. For this reason, a steering committee member should never facilitate the discussion about objectives, and usually local field staff should refrain from facilitating. Instead, try using a trained facilitator from outside the planning area.

For each resource concern, have the facilitator lead the steering committee through the following questions. All three questions should be answered *for each resource concern.*

1. What desired future conditions do we want to achieve with respect to the resource concern? *(Other ways to prompt discussion include: What do we want to happen with this resource concern? In what condition do we want the resource to be? Develop a goal statement for each resource concern.)*

2. What do we know about this concern? *(Ask the committee to describe the concern: What is happening? Where is it occurring? Why is it occurring? How long has it been happening? Has the intensity of the concern changed? What sources of information are available about the concern?)*

3. What do we need to know about this concern? *(Ask the committee: What questions do we have about this concern that need to be answered in order to solve it? What questions need to be answered in order to implement our solutions?)*

Initial discussions typically require objectives be stated in qualitative, or narrative terms. After the planning team complete the inventories and devise management strategies, the objectives can be quantified with target values based on the benchmark conditions.

It may take several meetings to record the steering committee's objectives, comments and questions for all the resource concerns. The results of these discussions should be typed and distributed to all members for their review. Changes can be made immediately if necessary, or additional changes might be made later in light of findings by the planning team.

If necessary, the steering committee can prioritize their objectives. Consider prioritizing objectives if they identify more than a few objectives for each resource concern. To prioritize objectives, use the same ranking technique explained in the section**,** "Identifying Resource Concerns."

Why ask "What do we know?" and "What do we need to know?"
The purpose of these questions is to document the existing knowledge among committee members about the resource concerns, and identify areas they feel need to be further investigated. Information about "what is known" and "what needs to be known" can help the planning team target their inventory work.

Stakeholders also tend to raise issues during the discussion that can potentially sidetrack their progress towards reaching consensus about objectives. For example, during the discussion someone may ask why the problem is occurring. Or another person may counter someone's opinion by citing a lack of information about some aspect of the problem. Recording these comments validates their concerns while avoiding having to answer the questions at this time. It is important to remember that technical questions about why or where problems are occurring or how the problems should be solved are left to the planning team as the planning project unfolds.

The facilitator's challenge is to keep this discussion focused on what the steering committee wants to achieve, while minimizing conversation about related issues. There will be time later to discuss these issues. The facilitator should help the steering committee understand that their questions are being recorded so that the planning team can provide answers for the committee's consideration.

In practice, people share their thoughts without necessarily connecting them to one of the three questions. That is, the facilitator may encourage the group to identify their objectives for a water quality problem, when someone calls out, "But how do we know the regulatory standard is fair?" The facilitator should acknowledge the comment, record it under the question, "What do we need to know?" and then continue soliciting comments. Because this is the way this exercise tends to proceed, it's helpful to use three flip charts; each headed by one of the questions. This allows the facilitator to record comments under the appropriate topic as they are offered.

The Next Step

After objectives are identified, it's time to organize the planning team using the list of resource concerns and objectives. Also, help the steering committee develop a mission statement for their committee.

Developing a Mission Statement

Why is it important?

1) The mission statement informs people in the planning area about the committee and the planning process. It is included in promotional brochures, correspondence, the areawide plan, and in grant applications to inform stakeholders and funding agencies.
2) The mission statement helps the media accurately convey the steering committee's intentions and activities to the public.
3) The mission statement helps the steering committee stay focused. The process of developing the mission statement clarifies areas of agreement and disagreement, and ensures that common understanding is reached early in the planning process. This facilitates decision-making later in the planning process.
4) The mission statement can help keep the steering committee motivated, by giving a clear verbal reminder of the group's purpose and objectives.
5) The mission statement can demonstrate the organizational relationship between the steering committee and related organizations. For example, if the steering committee acts as a citizen advisory committee to the county commission, then the steering committee's mission statement usually acknowledges that relationship.

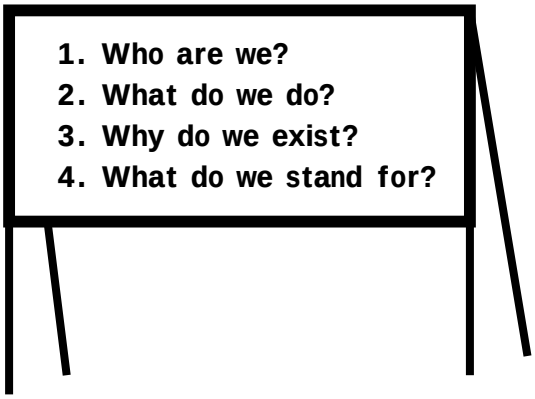
What is it?

The mission statement says:
-Who we are -Why we exist
-What we do -What we stand for

By answering these questions, the mission statement gives the group strategic direction. It serves as a guide for decision-making and goal development.

Using the assistance of a facilitator, an easy way to develop a mission statement is as follows:

Write the following questions on a flip chart:



The facilitator asks the group, brainstorming-fashion, to provide their answers until each topic is fully addressed.

- All answers are posted around the room.
- Each member of the group is asked to privately draft a mission statement utilizing all or part of the information in front of them. (Allow about 20 minutes for this, or until most people have finished writing.)
- Everyone--or those who wish to do so--shares their mission statement with the entire group.
- The shared mission statements are written so that everyone can see them at the same time.
- With the group's input, the facilitator underlines key phrases or words that are common among the various statements.
- Using consensus, the group selects one or two of the statements to work on. These are modified until the group devises a statement that all can support.

Once developed, a typed copy of the mission statement should be provided to all group

members. A large copy of it should be on display at all future group meetings.

The Next Step

The steering committee will establish a planning team, if they haven't already done so. They will also work with the technical advisory group to determine inventory needs.

Example Mission Statements

1) To develop, enhance and protect the ecological and socioeconomic values of the natural resources while continuing private ownership.

2) The objective of the steering committee is to develop a Comprehensive Management Plan for the natural resources in the entire Embarras River Basin. They hope to unite private citizens, public groups, and government agencies to address the resource problems related to watershed management.

3) The mission of the steering committee is to develop and encourage the funding and implementation of a long-range plan among landowners, government entities, and other appropriate groups which will help ensure safety to human inhabitants through proper enhancement, management and protection of the ecological and socioeconomic resources within the Blackberry Creek Watershed. This will include but not be limited to stormwater management, groundwater quality, aesthetic values, wildlife protection, and reduction in flood damages.

Scoping the Planning Process

What is it?

Scoping is used to determine what is important to investigate during the planning process. It involves identifying which concerns, actions, and impacts will be addressed in the development of the plan.

Why is it important?

Scoping allows stakeholders and technical experts to put their limited financial and technical resources towards investigating the most critical issues in the planning area.

When is it done?

Scoping occurs throughout Phase One and Phase Two.

How is it done?

Scoping comes into play during
- identification of resource concerns, and
- evaluation of alternatives.

Identifying Resource Concerns

The number of concerns in a planning area are potentially unlimited. During the brainstorming sessions, the steering committee identifies all their concerns. (See section, "Identifying Resource Concerns.") They group the concerns in a way that provide a logical framework for problem definition, and for the analysis and comparison of alternatives in later steps. For example, similar concerns may be combined as "Water Quality," "Residential Development," "Forest Management," and "Farmland Preservation".

Each concern is rated for its importance to the local people. The steering committee might use the Nominal Group Process to rank their concerns in order of priority, or they can rate the significance of each concern as high, moderate, low or none.

Resource Concerns	Significance to Stakeholders	Significance to Decision-Making	Remarks
Soil Sedimentation	High	High	Filling in lake
Water Water quality	Moderate	Moderate	Pesticides and surface water
Air No identified concerns			
Plant State-designated Natural Areas	High	Moderate	Glade habitat
Animal Threatened and Endangered species	Moderate	High	Indiana Bat habitat[1]
Human Cultural resources	Moderate	Moderate	Family farms

[1] *Early in the planning, stakeholders ranked the importance of threatened and endangered species as a "moderate" concern. However, during inventorying technical advisors discovered that the project area included habitat for the endangered Indiana Bat. National and state requirements therefore dictated a full accounting of this resource issue.*

Regardless of how they do it, the scoping process means the planning team base their inventory and evaluation work on the concerns that are most significant to stakeholders. The final management plan explains why those resource issues are most significant.

Evaluating Alternatives

Scoping is the process that is used to identify all the resource issues that need to be investigated in order to assess the effects/impacts of alternative solutions. Each management alternative will have effects and impacts on the resources in the planning area. In addition to affecting the targeted resource problem, a management alternative may affect related resources. For example, installing a flood-control dam on a river can reduce the targeted flooding problem. In addition, this alternative will affect water quality, threatened and endangered species, and adjacent land use. At a minimum, inventory information will be needed for compliance with the National Environmental Policy Act (see NEPA section), other environmental laws, and state or federal program requirements. Agencies, which provide financial support to the steering committee, may also require information. For most management alternatives, the following issues are usually critical:

- Cultural resources
- Threatened and endangered species
- Water quality
- Erosion
- Wetlands
- Human health and safety
- Environmental justice or equity

Those concerns that were considered, but found to not require detailed discussion in the plan are also identified. All parties involved in the planning should agree upon the relative insignificance of these issues.

Setting Up the Planning Team

What is it?

The planning team is a group of professionals who conduct resource inventories, evaluate the inventory data, and suggest management strategies that may meet the objectives identified by the steering committee.

When is it done?

After the steering committee has identified their resource concerns and objectives during Steps 1 and 2, they can begin putting together a planning team.

How is it done?

With assistance from NRCS or SWCD, the steering committee can identify possible planning team members by reviewing their list of the resource concerns and naming one or more individuals who have expertise in these areas. Typically, team members are drawn from local government, non-profit and private organizations, and state and federal agencies. Appropriate individuals are those who have experience with the resource issues and the willingness to assist with the planning effort. Local experts are particularly valuable because they have intimate knowledge of the project setting. Some steering committee members with expertise in the issues may wish to also serve as planning team members.

Planning Team Members:
-Help guide the planning process
-Help identify problems and opportunities
-Inventory resources
-Analyze resource data
-Develop and evaluate alternatives
-Document local planning decisions
-Help find appropriate programs
-Help implement and evaluate plans

The following are some of the organizations that may contribute planning team members.

Local Organizations
- Soil and Water Conservation District
- Planning and zoning office
- County commission
- Business and industrial groups
- Public works departments
- Financial Institutions
- Neighborhood & Homeowners Assoc.
- Non-Profit Organizations

Federal Government
- USDA-Natural Resources Conservation Service
- USDA-Farm Service Agency
- USDA-Rural Development
- U.S. Fish and Wildlife
- U.S. Environmental Protection Agency
- Army Corps of Engineers

State Government
- University Cooperative Extension
- Department of Agriculture
- Department of Natural Resources
- Environmental Protection Agency
- Department of Commerce/Community Affairs
- Missouri Department of Conservation

Once people are identified, they should be personally contacted to ask if they are interested in serving on the planning team. Briefly describe the planning project and why they are needed. Follow this initial contact with a formal letter of invitation on Soil and Water Conservation District or other organizational stationary. The letter typically states the nature of the problems motivating the planning project and the time, date, and place of the first team meeting. The letter should be signed by the steering committee chairperson and sponsoring organizations, such as the SWCD.

Those invited to participate on the planning team have an initial meeting where they learn about the planning process, the resource concerns, and their role in the project. During this meeting NRCS or SWCD staff familiar with areawide planning can explain the planning team role in inventorying, evaluating, developing management strategies, and in some instances assisting with implementation. The first meeting can be attended by the entire steering committee, to give the steering committee and planning team an opportunity to get to know each other and discuss the issues. The Chair of the steering committee should lead the first meeting of the planning team. The NRCS District Conservationist and a SWCD representative should also be present.

Sometime during the first couple planning team meetings, a leader should be named. The planning team leader will delegate assignments, complete assignments, maintain accountability, monitor schedules, and serve as coach.

At this point a plan of work should be developed jointly by the steering committee and planning team to guide the planning process. The plan of work should identify planning activities, who is responsible for the activity, and when the activity will be completed. The planning steps form a good framework for the plan of work.

The Next Step

Once the planning team is organized, they will begin collecting data about conditions in the planning area.

Step 3

Conducting Resource Inventories

Why is it important?

Resource inventories provide factual, objective data about the planning area, and are vital for sound decision-making. Resource inventories detail the condition of soil, water, air, plant, animal and human resources (SWAPA+H). Resource inventories are needed to determine the severity of resource concerns, identify opportunities for improvement, and determine which strategies may be most appropriate given conditions in the planning area. They help local stakeholders understand the human interaction with the environment, and interrelationships among resources in the planning area. Inventories provide a description of current conditions— called "benchmarks"—that are compared with future conditions desired by the steering committee. Inventories are also used to forecast potential impacts resulting from various resource management alternatives.

When is it done?

Resource inventories are compiled after the steering committee has identified the resource concerns and objectives in the planning area.

How is it done?

The planning team is primarily responsible for compiling resource inventories with the technical advisors providing significant input into the process. Members of the steering committee occasionally assist them. At a minimum, the steering committee should advise the planning team on where they believe problems are occurring, the severity of problems, and any questions they have about the resource concerns (see "Determining Objectives"). The planning team and the steering committee should communicate throughout the inventory work.

It is generally good business to develop and distribute a written inventory action plan.

Everyone involved will know what is going to be inventoried, who is doing the various inventories, to what intensity, and during what time frame. The planning team uses various methods and procedures to collect inventory data and may suggest more areas that need to be investigated. The scoping process helps to identify which inventories need to be conducted.

Types of inventories needed should be based on:

- ✓ Stakeholders' identified problems, opportunities, and concerns
- ✓ Objectives developed for the planning area
- ✓ Complexity of the natural resource setting
- ✓ Desires of the steering committee and stakeholders
- ✓ Pertinent local, state and federal regulations

Inventory intensities should be based on the need to determine:

- ➢ Current and historical resource, economic, and social conditions and trends
- ➢ Cause and effects of existing problems
- ➢ Potential problems
- ➢ Future conditions if current trends and treatment continue
- ➢ The feasibility of taking advantage of the opportunities identified
- ➢ Monitoring underway, completed, or needed

Factors to consider in inventories:

1. Cost of process
2. Time involved
3. Accuracy of information needed

Additional Considerations

Before beginning inventory work, the planning committee reviews existing data.

For example, look at previously developed areawide plans, community plans, demographic studies, and floodplain studies. In some cases, data from these studies only needs to be updated for current conditions. Occasionally, cost considerations or lack of technical staff make it impossible to gather all the information needed for a full inventory of certain resources. In these situations, the planning team makes the recommendation that funding should be sought to complete the inventory. A typical example is when a watershed lacks a hydrologic model to accurately assess the impact of various flood-mitigation measures. The planning team might identify general strategies for reducing flooding, but also recommend that a hydrologic model eventually be developed to better gauge the impacts of each alternative.

The inventory process includes documenting the data found. Worksheets help the planning team document the inventory data in an easy-to-understand format. Examples of these worksheets are: the Problems Identification Worksheet that is contained in the NRCS Field Office Technical Guide, the Woodland Planning Worksheet, the Sheet and Rill Erosion Worksheet, or the Grazing Land Evaluation Worksheet.

Inventory documentation includes a description of the methodology used to complete the inventories, a detailed description of the planning team findings and interpretation of results, and identification of additional information, if any, that needs to be collected in subsequent studies. This inventory information is reviewed by the steering committee.

The Next Step

As inventory information is compiled, the data needs to be analyzed.

A complete inventory:

1. Provides the benchmark (existing) conditions for the planning area
2. Helps determine resource trends, problems, and opportunities
3. Can include descriptions of such things as population trends, economic conditions, social considerations, current crops, farming practices, livestock types, available equipment, etc.

Existing Material

Keep in mind that a large amount of material may already exist. Examples include:

- Information from knowledgeable stakeholders (flood levels, economic information, social considerations, trends, community values, etc.)
- Material from local organizations
- Information and data from local, state and federal agencies
- Demographic data
- Economic data
- Population trends
- Agricultural statistics
- Business statistics
- Soil surveys
- Monitoring results (water quality, air quality, water use, contamination, etc.)
- Weather records
- Previous inventories (HEL, wetland, land use, wildlife, water samples, water supply, etc.)
- Previous studies
- Existing Plans
- Natural Resource Inventory
- Land use and trends
- Production records
- Aerial photography
- Infrastructure (roads, power lines, pipelines, urban developments, etc.)
- Zoning information
- Tourism information
- Threatened and endangered species

National Environmental Policy Act (NEPA)

What is it?

The National Environmental Policy Act (NEPA), signed into law on January 1, 1970, requires Federal agencies to consider the effects of proposed major Federal actions on the human environment. This Act and regulations require in some cases, environmental assessments and environmental impact statements.

Why is it important?

NEPA is a tool to foster better decision-making. The NEPA process is intended to help public officials and locally-led planning groups make decisions that are based on an understanding of environmental and human consequences, and to take actions that protect, restore, and enhance the environment.

When is it done?

In site-specific planning, the decision-maker is often only the landowner. That is the case when NRCS is providing pure technical assistance and simply helping the landowner decide what to do. There are other circumstances when NRCS is giving advice and recommendations about what conservation practices or systems would help the landowner meet their personal goals. In these cases, NRCS has no real control over what kind of action will ultimately result, so no federal action has occurred that triggers NEPA requirements.

However, once financial assistance is provided to the landowner, federal action has occurred, and NEPA requirements are triggered. For this reason, when NRCS provides technical assistance, NRCS will complete a well documented environmental evaluation. See Exhibit A, Environmental Effects for Resource Management Plans (CPA-52). This document can constitute the environmental assessment that NRCS requires for activities involving a single landowner.

During areawide planning, it makes sense for NRCS to follow the NEPA process. In doing so NRCS can consider the cumulative effects of its activities. This is required by both the Council on Environmental Quality NEPA regulations, and NRCS regulations.

The goal of both NEPA and the NRCS areawide planning process is to help stakeholders make informed and environmentally sensitive decisions about their resources. Incorporating NEPA in the planning process gives stakeholders complete information and promotes consistency in their decision-making.

Furthermore, at the time NRCS provides technical assistance, NRCS may not know whether financial assistance will also eventually be provided. Complying with NEPA early in the planning process enables federal funding to be used later without having to do additional documentation or perform additional analysis.

NEPA requirements for areawide planning involving federal technical and/or financial assistance are as follows:

• An ***Environmental Evaluation (EE)***- is always required, unless the planning effort proceeds directly to an Environmental Assessment or an Environmental Impact Statement.

• An ***Environmental Assessment (EA)***- is required if federally assisted.

• An ***Environmental Impact Statement (EIS)*** is required when....

1. The project involves stream channel realignment or work to modify channel capacity by deepening or widening where significant aquatic or wildlife habitat exists.

The EE will determine if the channel supports significant aquatic or wildlife habitat.

2. The project requires congressional action.

3. The project involves a broad Federal assistance program administered by NRCS when the environmental evaluation indicates there may be significant cumulative impacts on the human environment.

4. The project involves other major Federal actions that are determined, after environmental evaluation, to affect significantly the quality of the human environment. If it is difficult to determine whether there is significant impact on the human environment, it may be necessary to complete the EE and prepare an EA in order to decide if an EIS is required.

How is it done?

Following is more information about Environmental Evaluations, Assessments and Impact Statements.

Environmental Evaluations (EE)
Generally a short, brief evaluation of potential effects of alternatives on the environment. See Exhibit B for example EE documentation for areawide plans.

Environmental Assessment (EA)
An EA is used to determine whether an Environmental Impact Statement (EIS) is needed. The EA includes a brief description of the need for the proposed activity, possible alternatives to the proposed activity, and persons consulted. The EA documents potential environmental and human impacts of a project and assesses whether those impacts are significant. An EA will result in either a "Finding of No Significant Impact," or a "Notice of Intent to Develop an Environmental Impact Statement."

An Environmental Assessment (EA) is required if:

1. The proposed action is *not* a major Federal action positively or negatively affecting the quality of the human environment, OR
2. It is not *known* whether or not the proposed action is a major Federal action positively or negatively affecting the quality of the human environment.

Environmental Impact Statement
If the proposed action is a major Federal action significantly affecting the quality of the human environment, an Environmental Impact Statement (EIS) is required. The EIS details all environmental, social, and economic impacts of the project. Preparation of the EIS gives the public an opportunity to contribute to the decision making process. The result of the EIS is publication of a "Record of Decision" identifying which alternative was selected and why.

Refer to NPPH Part MO 600.1. The "Reference Table for Specific Conservation Planning Policies" identifies the NRCS reference book and state staff contact. For additional guidance, consult the
• General Manual 190, Part 410 - Compliance with NEPA.

Analyzing Resource Data

Step 4

What is it?

Analysis of resource data involves the review and interpretation of the resource inventories.

Why is it important?

Resource data analysis is an important step in identifying resource problems and the significance of the problem. Many times the resource analysis will show that what was perceived as a problem by the stakeholders in actuality is really not a problem or not as severe a problem as was envisioned. Resource data analysis helps the planning team and the steering committee use the information to full advantage. Studying the resource data reveals how individual resources relate to each other, and identifies causes and effects. Analysis also helps the planning team present the information in a meaningful way to the steering committee.

When is it done?

Although "Conducting Resource Inventories" is Step 3 of the planning process, and "Analyzing Resource Data" is Step 4, in reality these two activities usually occur at the same time. As resource data is accumulated, the planning team is continually evaluating the results to determine if more investigation is needed for that particular resource, or if techniques for other resources need to be changed in light of the findings.

How is it done?

The planning team is primarily responsible for analyzing the resource inventory data, but they seek input from the steering committee and if necessary, use the expertise of additional agencies and groups (i.e. technical advisors). Manual and automated data analysis tools are used during this step. These include but are not limited to the models, GIS analysis, and Site Specific Physical Effects Worksheet in the NRCS Field Office Technical Guide, Section V. The planning team is encouraged to use such models during data analysis.

The planning team determines the type of analysis needed based on the resource concerns, opportunities and objectives of stakeholders. They also consider the planning scope, potential for adverse impacts, and the ecological and human setting of the planning area. Data analysis is comprehensive. It addresses all ecological, economic, and social factors.

The planning team uses data analysis to determine present conditions in the planning area. Working with the steering committee, the planning team also evaluates whether present conditions meet their objectives.

Data analysis is used to identify present and future resource trends and for ways to moderate those trends. The planning team identifies causes and effects— asking, "why is this occurring?" to identify causes and "what is occurring?" to identify effects.

The results of the analysis is communicated in a format easily understood by the steering committee, other local groups, and the general public.

For more information

The NRCS Field Office Technical Guide provides a list of resource analysis methods for most resources. Also contact NRCS resource specialists for assistance.

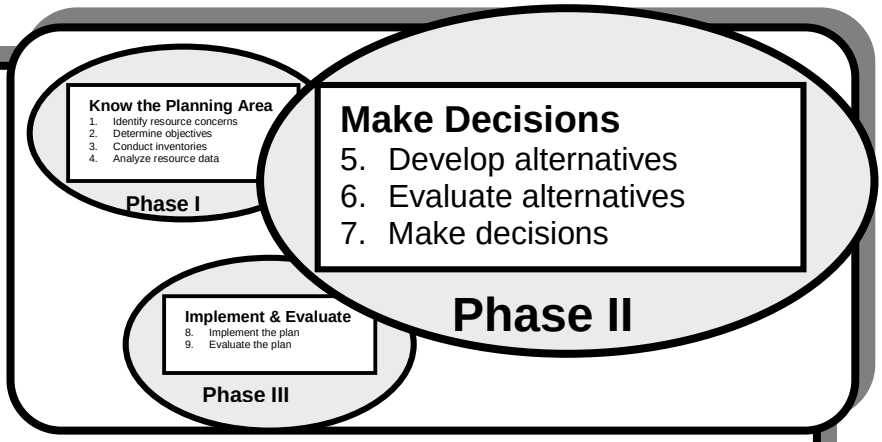
KEY POINTS

- **Involve the steering committee, other agencies and local groups in data analysis.**
- **Establish a schedule for completing resource inventories and data analysis.**
- **Consider public opinion and communicate frequently with the steering committee.**
- **Review existing reports and studies for relevant data and data analysis. How do the findings compare?**

The Next Step

After resource inventory data is collected and analyzed, the steering committee reviews the resource concerns, opportunities, and objectives which were initially identified to see if revisions should be made given the inventory findings of the planning team. New concerns may be identified, objectives may need to be changed, or new opportunities may be revealed.

Once the problems, opportunities and objectives are finalized, the plan moves into Phase Two.



Phase Two:
Make Decisions

Step 5 - Developing Alternatives

Step 6 - Evaluating Alternatives

Step 7 - Making Decisions

Step 5

Developing Alternatives

What is it?

Alternatives are the resource management options developed by the planning team and steering committee. The planning team develops alternatives that can solve the problems and meet the objectives of the steering committee. The steering committee reviews the alternatives with help from technical advisors. Those that the steering committee feels it can endorse are then included in the areawide plan.

How is it done?

The planning team develops alternatives based on their resource inventories and analysis of the resource data. In addition to formulating strategies that will solve the problems identified by the steering committee, they consider acceptability to stakeholders, NRCS quality criteria, existing opportunities, and ways to prevent additional problems from occurring. Management system templates and the NRCS Field Office Technical Guide (FOTG) are used to develop alternatives.

The steering committee should be involved throughout the process of formulating alternatives so that decision-making is improved and the acceptability of solutions is continually considered. Typically, this involvement is accomplished via periodic informal presentations from the planning team to the steering committee about the progress of the planning effort. Further, participation of one or more members of the steering committee on the planning team helps facilitate communication among the two groups.

Initially, multiple solutions are identified for the steering committee's consideration. These may include structural approaches (e.g., floodwalls or streambank stabilization measures), non-structural measures (e.g., flood-proofing or emergency evacuation procedures), market-based measures (e.g., incentive payments), and institutional approaches (e.g., regulations or buyouts). Multiple alternatives give the steering committee the opportunity to select the best approaches given the unique social, political, economic, and cultural considerations in their area.

- Planning teams need to rely heavily on the problem statements and objectives identified by the steering committee early in the planning process. Review meeting minutes and other notes taken during the meetings to understand the steering committee's concerns and objectives. Steering committee perceptions are critical to identifying appropriate alternatives.

- Strive for different and innovative solutions, and avoid dwelling on costs during the early stages of identifying alternatives.

- Make a preliminary evaluation of the effects of the alternatives, including an estimate of future conditions if no action is taken. Effects should include estimates of ecological, social, economic, and other consequences of the alternatives.

- Avoid the need for environmental mitigation by developing alternatives that avoid cultural, social, and ecological damages. If alternatives cannot avoid negative impacts, try to minimize impacts, or plan to mitigate for losses per the National Environmental Policy Act (NEPA). Estimated costs to mitigate any potential ecological damages need to be shared with the steering committee.

- Prepare a concise summary of each alternative with maps and other supporting data to help the steering committee understand the suggestions.

Step 6

Evaluating Alternatives

What is it?

The purpose of evaluating alternatives is to help the steering committee make sound decisions about which management strategies they will advocate in the areawide plan. Alternatives are evaluated to determine their effectiveness in addressing the concerns, taking advantage of opportunities, and meeting objectives in the planning area.

How is it done?

After alternatives or strategies have been identified, the steering committee and the planning team evaluate the acceptability of the alternatives. A facilitator is used during this step, and technical advisors are available to provide information and answer questions.

Evaluate alternatives by examining the benefits and drawbacks of each alternative. During the evaluation of alternatives, careful consideration is given to social, economic, and ecological factors that influence the predicted outcome. Encourage discussion and use visual aids to help explain alternatives. Planning teams can prepare technical specifications and a short concise narrative for each alternative. For each alternative include costs, and positive and negative benefits.

The steering committee considers the "effects" and the "impacts" of each alternative. The alternatives are compared to benchmark conditions to evaluate their ability to solve problems, meet quality criteria and meet the steering committee's objectives. The planning team and technical advisors can help the committee evaluate the effects of each alternative and describe the impacts. The effects are outcomes or results of the management strategy. Impacts are the differences between initial conditions and the effects of the alternatives. Here is an example:

- The "benchmark" is a soil loss of 20 tons per acre per year.
- The "effect" of one alternative is soil loss of 4 tons per acre per year.
- The "impact" is soil loss reduced 16 tons per acre per year.

Alternatives are compared based on their potential to bring about the desired future conditions identified by the steering committee. They are also evaluated by their effect on other resource conditions using the NRCS Field Office Technical Guide (FOTG) quality criteria. Limitations to using FOTG quality criteria is that they do not cover all ecological, economic, and social considerations that can be used for evaluating alternatives. Another way to evaluate alternatives is to use an Alternatives Analysis Worksheet (see Exhibit B)

Public review or comment may be needed during the evaluation of alternatives. This will help inform the steering committee about the various effects and acceptability of the alternatives.

During this step, give some thought as to how the strategies might be implemented. Identify NRCS programs, programs of other agencies, and other funding opportunities that may be available to implement the alternatives. Doing this helps in the evaluation of alternatives by providing information about how feasible they may be. The steering committee may also need to revisit the objectives and mission statement in order to determine if they need to be changed in light of the range of possible management alternatives suggested by the steering committee.

Step 7

Making Decisions

Making decisions involves the steering committee selecting the preferred management alternatives among those identified by the planning team. The preferred strategies will be documented in the plan. The steering committee may or may not be able to make decisions. They may only be able to make recommendations to the decisionmakers. This is why it is important to have decisionmakers represented on the steering committee.

When do we do it?

Decisions about alternatives are made during Step 7 of Phase Two of the planning process. Decision-making occurs after each alternative is evaluated for the ecological, economic and social effects and impacts as well as for their acceptability to the community.

How do we do it?

Making decisions involves using information generated during the "evaluation step" about the economic viability, social and political acceptability, and environmental integrity of each alternative.

The steering committee— assisted by a facilitator— reviews the evaluation information for each alternative. During this review, there should be a lot of discussion among steering committee members about the pros and cons of the strategies, how each member views the alternatives, how achievable the alternatives may be, and whether the alternatives can be supported by the community. This discussion is the primary opportunity for the steering committee to assess the acceptability and feasibility of the various management strategies.

During the decision-making discussion, the various differences among committee members in values, objectives or concerns may come to a head. Conversations may become heated as members take a stand for or against a strategy. Effective ground rules for discussions and a skilled facilitator is therefore crucial at this step. Planning team members and technical advisors should be present to answer questions, clarify information, and provide feedback.

Occasionally the steering committee contracts with a technical writer to draft the plan. At a minimum, the technical writer will want to be present during discussions about alternatives.

It is important to note that the final plan must reflect the views of the steering committee (and the community at large) rather than the views of the technical writer.

It is often useful to make decisions about the whole range of alternatives in a single meeting. This may entail an entire day devoted to this task, because oftentimes the planning team recommends many management strategies. Stopping discussions and starting again a week or two later may inhibit the decision-making process. It is harder for people to remember all the strategies, keep in mind their various interrelationships, and account for concerns and comments during the discussions.

Remember Public Input!

Public input is critical during both evaluation of alternatives and during decision-making. Public participation reveals information about socio-economic impacts, effects and acceptability, which is critical for the steering committee to make sound decisions. Public input can be obtained in a variety of ways. If the steering committee makes decisions in isolation from the community, it risks the plan being rejected or never implemented. Therefore,

no matter how it's done, public input is most useful during the evaluation and decision-making steps rather than only after the plan is drafted. One outcome of this public review process may be a need to modify concerns, revise objectives, or restate effects. Giving adequate time and attention to this stakeholder review process will pay off in a better areawide plan that is more likely to stand the test of time.

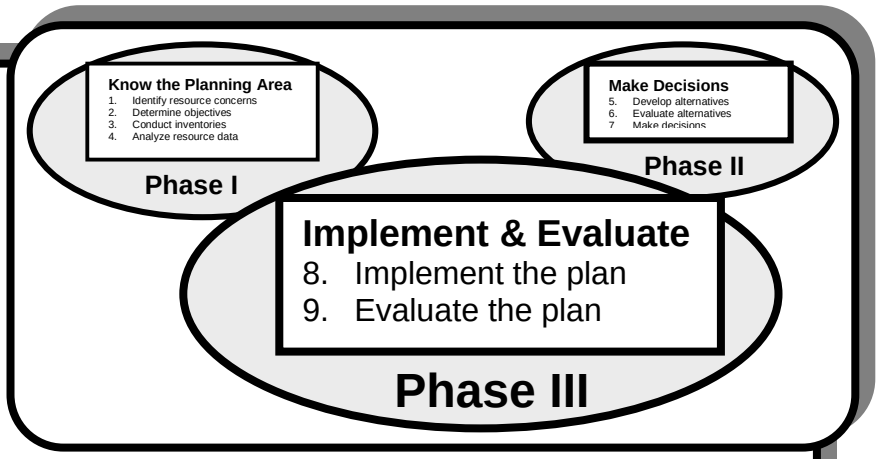
The Next Step

Decisions will be documented in a "draft" plan along with a description of the planning process, inventory data, implementation strategies and other information deemed important by the steering committee. This draft plan will be reviewed by the local agencies and interest groups, and their comments incorporated into the final plan.

Once decisions are reached, implementation strategies for achieving the alternatives are devised. This means that the plan will include implementation information indicating who, what, when, and how the actions will be applied to the planning area.

Tips for Decision-Making

- Making good decisions requires understanding the economic, social and environmental advantages and disadvantages of each alternative.
- Stakeholders, through a facilitated process, should be given the opportunity to review the proposed alternatives. Planning team members should be available during discussions.
- The results of public input and review should be documented in the plan.



Phase Three: Implement and Evaluate

Step 8 – Implementing the Plan

- **Obtaining Funding**

Step 9 – Evaluating the Plan

Step 8

Implementing the Plan

When do we do it?

In theory, plan implementation occurs after a written areawide management plan is finalized. In practice, however, some elements of the plan may be implemented before the plan is finalized and distributed throughout the planning area.

When do we do it?

Implementation of plans requires the participation of citizens and local, state, and federal partners. Implementation entails using the plan to seek financial and technical support from many sources, meeting program requirements and deadlines, and designing, laying out, constructing, inspecting, and maintaining practices.

Typically, the steering committee is responsible for ensuring the plan is implemented. This often entails reconfiguring the steering committee into a new "Implementation Committee." Doing this gives closure to stakeholders who have been actively involved in the long planning process. Some steering committee members may choose to not take part in the implementation activities, and new stakeholders can be invited to help.

Implementation committees often organize themselves as "Friends of" or "Coalition" groups. They may have many citizen members, a Board of Directors, and non-profit status. These coalitions spearhead projects, act as community advisors and advocates for the plan, and seek project funds. Their membership tends to be fluid with new stakeholders continually participating.

To help coordinate multiple activities and participants, the implementation committee should strategize about what needs to be done to apply the practices recommended in the plan. Regardless of whether it's included in the plan or documented separately, some kind of implementation strategy is necessary to determine how the actions in the plan will be applied. This will ensure that the plan is actually carried out, rather than shelved and forgotten.

Occasionally, some implementation has occurred before the plan is finalized. Grant money may have been obtained, flood prone homes bought out, or demonstration projects installed. The implementation committee should review the plan and identify any actions that are currently being pursued, and anything else that needs to be done to complete these projects. Then, for the remaining actions they should determine:

- ✓ **Which activities should be a priority?** Initially consider tackling easy projects that are not controversial to build confidence and community support. Also prioritize projects based on how serious the need is and how likely it is to be successful.
- ✓ **Where will the activities take place?** Locations probably were identified in the plan, but additional surveying or more detailed data collection may need to be done.
- ✓ **Who are the responsible parties to implement the actions, and what sources of technical assistance are needed to help?** Consider local, state, and federal agencies, as well as non-profit and for-profit organizations.
- ✓ **How will the actions be financed?** Consider staffing needs and opportunities for local communities to provide matching monetary and non-monetary contributions.
- ✓ **When will the actions take place?** Devise a tentative implementation timetable to guide the work.

Additional Considerations

• Keep the public informed and involved. Try demonstration projects, kick-off campaigns, field days, newsletters, and regularly report activities in local media and to community leaders. Seek citizen volunteers and community groups to participate, so results happen and community support increases.

• Particularly for the design and installation of structural practices, coordination at multiple levels will be needed for the survey, design, layout, certification, and maintenance of work.

• Identify projects for which financial assistance is needed. Include in the implementation strategy any steps that need to be taken to obtain funding. Identify who will apply for grants and any additional documentation that may be needed.

• Identify any mitigation issues, environmental requirements, and other information needed to implement the plan. Items to consider include federal, state and local permitting requirements, interagency agreements, and other laws and executive orders; such as NEPA and those concerning threatened and endangered species, historic properties, and cultural resources.

• Coordinate implementation with other planning and implementation bodies, especially with county, municipal neighborhood, and growth management plans. Also coordinate with the independent conservation activities of individual landowners, local municipalities, and non-government organizations.

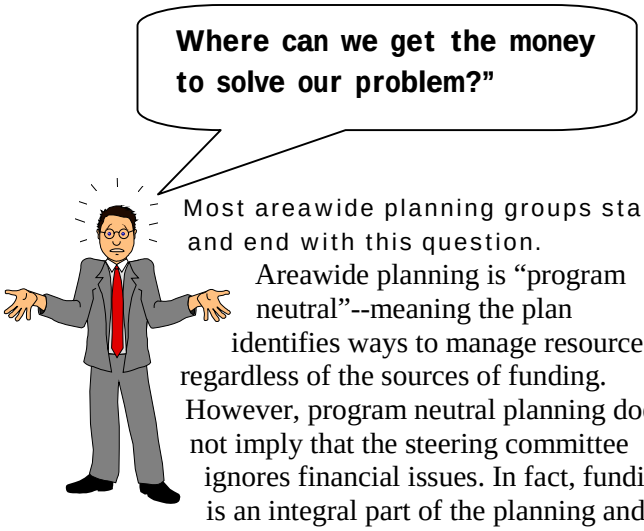
• Identify land rights and permits that will need to be secured. Ensure all parties clearly understand their responsibilities, and that project sponsors secure necessary permits such as dam safety permits and those required under Sections 401 & 404 of the Clean Water Act.

• Identify the agreements that will be needed for cooperative projects, and for the operation and maintenance of completed projects. Consider contracting issues--for example, long- term contracts needed for upland treatments.

• Consider documenting the implementation approach, including:

- ✓ Tasks
- ✓ Responsible Persons or Organizations
- ✓ Sources of Funding and In-kind Services/Amount
- ✓ Scheduled Start Date/Scheduled Finish Date
- ✓ Actual Start/Actual Finish

Obtaining Funding



Most areawide planning groups start and end with this question.

Areawide planning is "program neutral"--meaning the plan identifies ways to manage resources regardless of the sources of funding. However, program neutral planning does not imply that the steering committee ignores financial issues. In fact, funding is an integral part of the planning and implementation process. Most alternatives have some cost associated with their implementation. Even producing and distributing the plan document costs money.

Once the plan begins to take shape, the steering committee, with assistance from the planning team, starts looking for ways to fund their ideas.

Getting the funds to carry out stakeholder ideas involves commitment, energy, and time. But the most important elements of successful funding are already in place: A viable, organized stakeholder coalition, systematic consideration of goals, needs, and alternatives...all documented in an areawide management plan. In Missouri, local, state, and federal government programs are available for landowners and communities to protect, enhance and restore natural resources. Non-profit organizations and private industry also provide assistance.

The steering committee actively searches for the opportunities to apply for funding. They may need to enlist help from the local SWCD, city, village, or county government. Consider creating a "grant writing" team with partners who have experience with grants.

Areawide plan decisions may include making specific applications and proposals for funding.

Next Step

The steering committee develops an implementation schedule to include in the plan. The implementation schedule lists potential funding sources and assigns responsibility to individuals who will write applications for funding. The steering committee--or new "Implementation Committee"-- continues to meet regularly to ensure the plan is implemented.

As funding sources are sought, some projects will begin being implemented. The areawide plan continues to be distributed and promoted throughout the planning area. Evaluation of projects and the plan as a whole also begins.

The U.S. Environmental Protection Agency offers a comprehensive guide to financial resources called *A Guidebook of Financial Tools: Paying for Sustainable Environmental Systems.* This publication is only available in electronic format from the EPA web site at http://www.epa.gov/efinpage/guidbk98/index.htm

Opportunities for Areawide Plan Implementation Assistance

Program	Primary Contact / Funding Agency	Support Agencies
Environmental Quality Incentive Program **(EQIP)**	NRCS/FSA	SWCD, MDC, UOE
Conservation Reserve Program **(CRP)**	FSA	NRCS, SWCD, MDC
MO. Cons. Reserve Enhancement Program **(MoCREP)**	FSA/MDNR	NRCS, MDC
Section 319 Clean Water Act Grants **(CWA)**	EPA/MDNR	SWCD, UOE, NRCS
Section 319 Clean Water Act Mini-Grants **(CWA)**	EPA/MDNR	SWCD, UOE, NRCS
Section 604(b) Clean Water Act Grants **(CWA)**	EPA	Regional Planning Commissions
Section 104(b)(3) Clean Water Act Grants **(CWA)**	EPA	MDNR
Small Watershed & Flood Prevention Program **(PL-566)**	NRCS	SWCD
COE Watershed Protection Programs	COE	
State Cost-Share Incentive Program	SWCD/MDNR	NRCS, MDC
Loan Interest-Share Program	SWCD/MDNR	NRCS
Special Area Land Treatment **(AgNPS SALT)**	MDNR-SWCP	NRCS, UOE, MDC
Private Lands State Conservation Cost-Share Program	MDC	NRCS, SWCD
Forestry Incentives Program **(FIP)**	NRCS	FS, FSA, MDC, SWCD
Wetland Reserve Program **(WRP)**	NRCS	MDC, SWCD, FWS
Wetland Heritage Program **(WHP)**	MDC	NRCS, SWCD
Habitat Improvement Program **(HIP)**	FWS	SWCD, NRCS
Wildlife Habitat Improvement Program **(WHIP)**	NRCS	SWCD, MDC
Resource Cons. & Development Programs **(RC&D)**	RC&D	NRCS, SWCD, County Commissions
Technical Assistance & Training Grants **(TAT)**	RD	NRCS
Watershed Assistance Grants **(WAG)**	EPA	NRCS, MDNR
Water & Waste Disposal Loans & Grants	RD	
Animal Waste Treatment Loan Program	MASBDA	
Single-Purpose Animal Facilities Loan Guarantee	MASBDA	

Agency Acronyms

Missouri Department of Natural Resources	**MDNR**	U.S. Environmental Protection Agency	**EPA**
Missouri Department of Conservation	**MDC**	U.S. Fish & Wildlife Service	**FWS**
University Outreach & Extension	**UOE**	U.S. Army Corps of Engineers	**COE**
Missouri Agricultural & Small	**MASBDA**	USDA-Farm Service Agency	**FSA**
Business Development Authority		USDA-Forest Service	**FS**
Soil and Water Conservation District	**SWCD**	USDA-Natural Resources Conservation Service	**NRCS**
Soil and Water Conservation Program	**SWCP**	USDA-Rural Development	**RD**

For more information on the above programs, loans, or grants refer to the following sources:

- Contact the supporting agency directly.
- Refer to the "Missouri Conservation Assistance Guide" available in most natural resource agency offices.
- Visit the Missouri Watershed Information Network (MoWIN) online at:

http://outreach.missouri.edu/mowin

Then, go to Acronym City and click on the appropriate acronyms highlighted above.

Step 9

Evaluating The Plan

Areawide plans should be periodically evaluated and plans should be updated and modified, as needed. An evaluation action plan should be developed to measure the effectiveness of the areawide plan and progress to achieve intended goals.

The evaluation action plan will contain two types of objectives. These are *management objectives* and *monitoring objectives*. Management objectives measure the success of implementation. They may be used to answer questions like:

- What practices are being applied?
- Where in the watershed are practices applied?
- Are all elements of the plan being applied according to schedule or are some practices lagging?
- Are producers or landowners in some areas of the watershed more reluctant to participate?

Management objectives are helpful in fine tuning the plan and working out the bugs in implementation.

Monitoring objectives measure the success of the plan in protecting or improving natural resources. They may be used to answer questions like:

- Were the assumptions, upon which the alternatives were formulated and selected, actually true?
- Have there been changes (e.g., new technology, new programs, changes in technical standards, etc.) that should be incorporated into the plan?

Monitoring objectives help to redirect the plan if it is missing the target or if there are significant changes.

A well-constructed set of evaluation objectives will drive the evaluation action plan so it is important to word them carefully. A helpful syntax for objective statements breaks them into three pieces:

infinitive verb + object word or phrase + constraint

An infinitive is a verb form that is typically preceded by the word *to* such as *"to determine…", "to evaluate…", "to assess…"*. The second piece is the object. The object receives the action of the verb and answers the question, "What?" The third piece of the objective statement is the constraint. The constraint limits the objective in space or time or may limit the objective to specific variables. A complete monitoring objective might be:

"To determine + the effects of implementing conservation practices + on fecal coliform levels in Long Branch Lake."

Most projects have multiple planning objectives and thus will have multiple evaluation objectives. Some evaluation objectives are dependent upon others. The relationships among objectives can be better understood by developing an objective tree. An objective tree displays all of the evaluation objectives in a hierarchical manner so that they may be prioritized. One way to develop an objective tree is to compare each objective to every other objective and in each case ask: "Does the achievement of objective A contribute directly to the achievement of objective B?" If the answer is "Yes" then B is dependent upon A and A must be completed before B.

Once evaluation objectives are established and prioritized, an action plan is developed to guide the evaluation efforts. The action plan should include a list of the information needed to satisfy each evaluation objective and the data needed to support the information. The action plan should also include a list of the tasks to be completed (including methodology), who is responsible for each task (including clients, contractors, NRCS, and other agencies), when the tasks

are to be completed, and the estimated cost for completing the task. Once the action plan for the evaluation is completed, concurrence and needed approvals should be obtained from all the agencies and groups that will be participating in the evaluation. A good action plan will schedule periodic reports on the findings of the evaluation and recommend changes in the areawide plan as needed.

Often a considerable volume of data must be collected and analyzed before meaningful conclusions can be made with any certainty. It is especially difficult and expensive to develop long-term water quality, habitat or natural resources data sets that establish cause and effect relationships. Therefore, it is essential that planners locate and evaluate all existing sources of information and clearly define precisely what information is needed before setting up their own monitoring program. The EPA, USGS, Corps of Engineers, USDA, Universities, state and local agencies, and non-government organizations may all have land use and water quality information available in various forms. Public water supply districts sample their raw water on a regular basis and will generally make this information available. Information from Stream Teams and Volunteer Water Quality Monitoring efforts may also be helpful in documenting improvements in natural resources conditions. Interpret existing data sets with caution considering the veracity of the source, the period of record, the intensity of sampling, and the resolution, accuracy and precision of the data. The best data sets include metadata (data about the data) that addresses many of these concerns. Collecting data is costly. Partnering with other agencies and groups, where possible, can minimize evaluation costs.

When monitoring is necessary, it pays to consult an expert. Many well-intentioned monitoring efforts have invested lots of money only to become data-rich but information-poor. The inherent variability in natural systems makes it difficult to establish reliable averages or trends much less detect effects of treatments in the watershed. A number of statistical tools and techniques are available to design monitoring programs that deliver the best return of information for the monitoring dollar invested. Variables must also be selected with care, as some are much less costly to monitor than others. Indicators derived from aquatic macroinvertebrate sampling, for example, reflect water conditions over the average life span of the organism. This information would give a more reliable picture of stream health than individual grab samples analyzed for chemical composition.

Areawide plans are often designed to influence social behavior and improve (or at least not damage) the economic wellbeing of the stakeholders. Many tools are available to measure changes in public perception, information and education accomplishments, and economic impacts resulting from plan implementation. For example, one objective might be *to compare knowledge and opinions of water quality issues in the watershed through surveys at the beginning, mid-point, and end of the project*. To accurately reflect the population sampled, surveys must be statistically sound. As with monitoring, it's best to consult with an expert before you conduct a survey.

Areawide management never ends. Conditions change, new opportunities arise, public support for particular project elements rise or fall, and additional planning elements are identified. Stakeholders must continually respond to these challenges, evaluate their areawide plan and modify it as necessary.

General Resources

Resources for Areawide Planning

- **Support Materials**
- **Web Site Resources**
- ***Getting to Know Your Local Watershed***

Resources for Areawide Planning

Support materials

There are many publications available that can aid the areawide planning process:

The **Conservation Technology Information Center (CTIC)** has published a "Know Your Watershed" series. The introductory guide "Getting to Know Your Local Watershed" has been added at the end of this section. Other publications that CTIC has available for areawide planning are listed on Page 7 of their guide with instructions on how to order.

The **Social Sciences Institute (SSI)** publish "The People, Partnerships and Communities Information Sheets Series" which provide guidance to the conservation partnership on effectively working with people and communities. Each information sheet covers one topic and answers the following 5 questions.

1. Why is the topic important?
2. Who benefits from the information?
3. When is the information useful?
4. How do you apply the information?
5. Where do you go to get more information?

Some topics include Running Effective Meetings, Listening Skills, Creating Effective Relationships with the Media. The information sheets are posted on the SSI WEB site:
http://people.nrcs.wisc.edu/socsciinstitute
For a free catalog contact SSI at:
(616) 942-1503

Any or all of these publications and information sources could be added to this guidebook for personal reference.

Web site resources

FEDERAL AGENCIES

Natural Resources Conservation Service
http://www.nrcs.usda.gov/
Offers general information, program information, and technical resources.

National Water and Climate Center
http://www.wcc.nrcs.usda.gov/wcc.html
Mission is "to lead the development and transfer of water and climate information and technology which support natural resource conservation."

National Water Quality Information Center
http://www.nal.usda.gov/wqic/
Offers electronic information about water quality and agriculture.

Stream Corridor Restoration Handbook
http://www.usda.gov/stream_restoration/scrhtx2.html
A reference intended primarily for interdisciplinary teams responsible for planning, design, and implementation of stream corridor restoration projects. The reference may also be useful to others who are working in stream corridor restoration, including contractors, landowners, volunteers, individuals, and agency staff. The reference is intended to aid in developing stream corridor restoration projects.

Clean Water Initiative/ Clean Water Action Plan
http://www.epa.gov/cleanwater/
Offers information concerning development of the Plan, partners, and related links.

Watershed Academy
http://www.epa.gov/OWOW/watershed/wacademy.html
Offers training courses and publications in watershed management.

Nonpoint Source Pollution Control Program
http://www.epa.gov/OWOW/NPS/
Offers information about the Section 319 Program and other EPA NPS programs.

Surf Your Watershed Program
http://www.epa.gov/surf/
Helps you locate environmental information about your watershed.

Top 10 Watershed Lessons Learned
http://www.epa.gov/owow/lessons

Pollution Prevention Grants Homepage
http://www.epa.gov/opptintr/p2home/
Offers information about EPS's Pollution Prevention Grants Program.

US Geological Survey
Missouri District
1400 Independence Road, MS 100
Rolla, MO 65401
Voice: (573) 308-3664
Fax: (573) 308-3645
http://wwwdmorll.er.usgs.gov/
Offers streamflow data, weather, forecasts, information on current studies and research, publications, and links.

U.S. Army Corps of Engineers, Missouri River Regional Headquarters
http://www.mrd.usace.army.mil/

STATE AGENCIES

Missouri State Government
http://www.state.mo.us/

Missouri Department of Conservation
http://www.conservation.state.mo.us/

Missouri Department of Natural Resources
http://www.dnr.state.mo.us/homednr.htm

University of Missouri
Missouri Watershed Information Network (MoWIN)
259 Agricultural Engineering
University of Missouri
Columbia, MO 65211
Voice: (800) YOU-CALL
http://outreach.missouri.edu/mowin/
Offers one-stop shopping for Missouri watershed information.

Center for Agricultural, Resource, and Environmental Systems (CARES)
200 Mumford Hall
University of Missouri
Columbia, MO 65211
Voice: (573) 882-7458
Fax: (573) 884-2199
http://www.cares.missouri.edu/
CARES Watershed Information Clearinghouse (CWIC) offers GIS-related watershed information.

University of Missouri Outreach and Extension Water Quality Focus Team
http://outreach.missouri.edu/wqfocus/
The University Extension Water Quality Education Program empowers citizens to conserve, protect and improve ground and surface water by targeting non-point source pollution prevention through a comprehensive approach to watershed management.

University of Missouri Outreach and Extension Water Quality Program
http://www.fse.missouri.edu/waterquality/
Water quality guides on-line.

Missouri Resource Assessment Partnership (MoRAP)
http://www.ecrc.usgs.gov/morap/
MoRAP is a cooperative involving state and federal government agencies. The goal is to develop and disseminate high quality natural resource information at the lowest possible cost so partner agencies can efficiently accomplish natural resource management.

NON-GOVERNMENT ORGANIZATIONS

Conservation Technology Information Center
Know Your Watershed Campaign
1220 Potter Drive, Room 170
West Lafayette, IN 47906
Voice: (317) 494-9555
Fax: (317) 494-5969
http://www.ctic.purdue.edu/CTIC.html
Offer a series of helpful guidebooks on watershed partnerships. Features MAX program, Desmodema interactive water quality game, National Watershed Network, National Watershed Library. Free catalog covering crop residue management, nutrient and pest management, youth education, watershed management, agricultural and urban BMP's.

Izaak Walton League of America
Save Our Streams Program
707 Conservation Lane
Gaithersburg, MD 20878-2983
(800) BUG-IWLA
http://www.iwla.org/iwla/jump6/index.html
Free catalog of books, videos, equipment, and workshops to help you monitor, protect, and restore streams.

Center for Watershed Protection
8391 Main Street
Elicott City, MD 21043
Voice: (410) 461-8323
Fax: (410) 461-8324
http://www.pipeline.com/%7Emrrunoff/
Offer workshops, publications, technical notes, and links. This is a good source of information for developing areas.

Leopold Center for Sustainable Agriculture
209 Curtiss Hall
Iowa State University
Ames, Iowa 50011-1050
Voice: (515) 294-3711
Fax: (515) 294-9696
http://www.leopold.iastate.edu/centers/leopold/Leopold.html
Offers free water cycle software, publications, competitive grants, and education programs.

NACD Net
http://www.nacdnet.org/
Offers information about NACD and conservation districts.

Soil and Water Conservation Society
http://www.swcs.org/
Offers books, publications, and membership information.

Water Environment Web
http://www.wef.org/
Offers information related to the Water Environment Federation.

American Water Resources Association
http://www.uwin.siu.edu/~awra/
The mission of the American Water Resources Association is to promote understanding of water resources and related issues by providing a multidisciplinary forum for education, professional development and information exchange.

Adopt-A-Stream Foundation
http://www.streamkeeper.org/
Mission is "To empower people to become stewards of their watersheds"

Center for River and Stream Studies
http://www.colostate.edu/Orgs/CRSS/
Mission: research, education, and technology transfer. Objectives: Develop effective Public/Private partnerships for focused problem solving related to rivers and streams. Train personnel in science and engineering specialties to develop inter-disciplinary approaches for comprehensive stream system solutions.

U.S. Department Agriculture MO-CPA-52
Natural Resources Conservation Service 9-98

Environmental Analysis for Conservation Planning

Client: _____
Farm Number: _____
Tract Number: _____
Field Number (s): _____
Evaluation Date: _____

Purpose: This form documents existing resource concerns/conditions and summarizes the effects and impacts of proposed conservation practices and activities on natural, human and cultural resources.

Instructions: This form will be completed for all planning activities on a conservation treatment unit. Indicate with a yes or no, all existing Concerns and Resources present. If an element does not apply, place a "N/A" in the comments block. Under Planning Impact, note whether the conservation activity will have a positive (+) or negative (-) impact. If an adverse impact is noted, explain in Comments section or on an attachment.

Natural Resources

	Existing Concern(s)	Planning Impact	Comments
Soil			
Water			
Air			
Plants			
Animals			

Human Resources

	Existing Concern(s)	Planning Impact	Comments
Social			
Economic			

Special Resources *(See NPPH pages MO600.1-10(1-6) for further explanation of categories)*

	Resource(s) Present	Planning Impact	Comments
Prime/statewide farmland			
Threatened/endangered species			
Landscape resource			
Natural areas			
Wild and scenic river			
Wetland/special aquatic site *			
Riparian area			
Floodplain management			
Stream channel modification *			

* *Landowner advised that a 404 permit may be required?* *No ❒ Yes ❒ N/A ❒*

Cultural Resources *(If "Yes", complete the reverse side of this form.)*

Do the planned practices include an undertaking (practices that may damage cultural resources)? No ❒ Yes ❒
(See 420 General Manual for Missouri listing)

___ To the best of my knowledge, no further environmental analysis is required.

___ To the best of my knowledge, there is or may be an adverse effect on one or more of the environmental aspects?

Evaluation completed by: _____

Cultural Resource Worksheet

Township _____ Range ____ Evaluation Date _____
Section _____ 1/4 Section Name of Practice _____
Farm Field Number _____ Tract Number _____

Historic Properties Review

A. Check the National Register of Historic Places. Site present? Yes ❑ No ❑

B. Does the Cultural Resources County Map indicate the presence of a known archeological site within the section? Yes ❑ No ❑

If yes, fax a Site Information Request form to the Archeological Survey of Missouri (ASM) Fax # (573) 882-9410

C. Are there any other buildings or structures of possible historical significance within the area to be treated? Yes ❑ No ❑

If either A or C is "yes", or if the ASM indicates that a known site might be in the Area of Potential Effect (APE), contact your Area Cultural Resource Coordinator (ACRC). The APE will have to be surveyed by an ACRC and/or Cultural Resource Specialist (CRS) if alternatives cannot be developed that do not include undertakings.

Discussion with Owner/Operator

A. Is the owner and/or operator aware of any historic structural remains such as old farmsteads, mill or logging camps, Indian mounds, graves, or aware of any artifacts that now or in the past occurred within the proposed construction zone?
Yes ❑ No ❑

If yes, contact your ACRC for help in filling out form SSC-MO-1, the Historical/Archeological New Site Report. The completed report is sent with attached documentation to the State Office CRC. The site will be assessed by the ACRC before a decision is made about having the site surveyed by a CRS. The site form should be filed in the separate 420 file reserved for site specific cultural resource information, and not placed in the case file.

Field Inspection and Appraisal

A. Date area to be disturbed (APE) was walked and visually searched for physical evidence of historic and/or prehistoric artifacts.
Date: _____/ _____/ _____ By: _____

B. Was anything found? Yes ❑ No ❑

If yes, contact your ACRC for help in filling out form SSC-MO-1, the Historical/Archeological New Site Report. The completed report is sent with attached documentation to the State Office CRC. The site will be assessed by the ACRC before a decision is made about having the site surveyed by a CRS. The site form should be filed in the separate 420 file reserved for site specific cultural resource information, and not placed in the case file.

Alternatives Analysis Worksheet

A. Planning Unit:	B. Desired Future Conditions					C. Resource Considerations																										F. Ranking of Alternatives
						1. Ecological									2. Economic									3. Social									
D. PROPOSED ACTIONS: (List a concise description of each proposed alternative below. The 'benchmark' or 'no action projection' is provided. Use additional forms as needed.)	1	2	3	4	5	a Erosion, soil quality, sedimentation	b Pollutants-chemical, biological	c Wetland, riparian, aquatic status*	d Stream channel condition*	e Wild/scenic rivers; natural areas*	f Coastal zone management areas*	g Threatened-Endangered species*	h Habitat quality/connectivity	i Air quality-local, regional	a Prime and unique farmland*	b Floodplain condition, storage*	c Capital	d Labor	e Management level	f Risk and uncertainty	g Profitability	h	i	a Visual resources status	b Cultural resources*	c Environmental justice*	d Client well-being, safety	e Community well-being	f Client acceptability	g Public acceptability	h	i	
	E. Effects: "+2" significantly beneficial (meets QC), "+1" some benefit, "0" no effect, "-1" some impairment, "-2" significantly adverse																															
Benchmark conditions (no action projection)																																

Step 1: For the planning unit designated in part A, enter the desired future conditions (DFCs) in part B based on objectives identified by clients, stakeholders and interdisciplinary planning teams. Enter additional ecological, economic or social considerations as needed in part C. In part E, rate the 'benchmark' conditions against 'quality criteria' (QC) for all columns to the right using values of +2 (meets or exceeds QC), +1 (beneficial but not currently meeting QC), 0 (no effect), -1 (non-significant adverse effects), or -2 (significant adverse effects). Enter a dash for any ecological, economic or social consideration that repeats a listed DFC. Note: Specific QC for the planning unit may be documented in part G on the back of the worksheet.

Step 2: For the planning unit, enter a concise description of each proposed alternative in part D. In part E, rate each alternative against QC for all columns to the right using the values of +2, +1, 0, -1 or -2 (assume the alternative is fully applied and functional). If desired, short-term effects can be rated in the same box; use parentheses around the rating to differentiate from fully applied ratings. Enter a dash for any ecological, economic or social consideration that repeats a DFC. Using consensus or other approach, decision-makers may use block F to rank alternatives with special attention paid to any alternative with -1 or -2 ratings in part E.

***Special environmental concern with an underlying federal policy, act or requirement.**

G. Quality criteria and other environmental requirements for the planning unit.

Desired Future Conditions	Quality Criteria (QC)
1	
2	
3	
4	
5	

Resource Considerations	QC and/or Requirements*
Ecological	
Erosion, soil quality, sedimentation	
Pollutants-chemical, biological	
Wetland, riparian, aquatic status*	
Stream channel condition*	
Wild/scenic rivers; natural areas*	
Coastal zone management areas*	
Threatened-Endangered species*	
Habitat quality/connectivity	
Air quality-local, regional	
Economic	
Prime and unique farmland*	
Floodplain condition, storage*	
Capital	
Labor	
Management level	
Risk and uncertainty	
Profitability	
Social	
Visual resources status	
Cultural resources*	
Environmental justice*	
Client well-being, safety	
Community well-being	
Client acceptability	
Public acceptability	

* Refer to MO-CPA-52, Environmental Analysis for Conservation Planning

_____ _____

Preparer(s) Date